EDEXCEL A-LEVEL ECONOMICS A

ECONOMICS



EXAM QUESTION PACK

UNIT 3 OLD SPECIFICATION PAPERS

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Write your name here

Surname	Other names

Pearson Edexcel GCE

Centre Number	Candidate Number

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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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 In 2014 the luxury car maker Rolls-Royce Motor Cars Ltd gained full ownership of car engine supplier RRPS, after completing a buy-out costing £1.93 billion.

The benefits of this acquisition to Rolls-Royce are likely to be gained from

(1)

A a private finance initiative

B horizontal integration

C forward vertical integration

D backward vertical integration

E conglomerate integration

Answer ☐

Explanation

(3)

(Total for Question 1 = 4 marks)

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2 A firm which prints greetings cards records its short run costs. It observes that the average cost per card decreases as more are produced, although the marginal cost is rising. It follows that

(1)

A there are economies of scale

B the law of diminishing returns has not yet set in

C the fixed costs are zero

D marginal costs rise whenever average costs fall

E marginal costs are below average costs

Answer ☐

Explanation

(3)

(Total for Question 2 = 4 marks)

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)

(Total for Question 3 = 4 marks)

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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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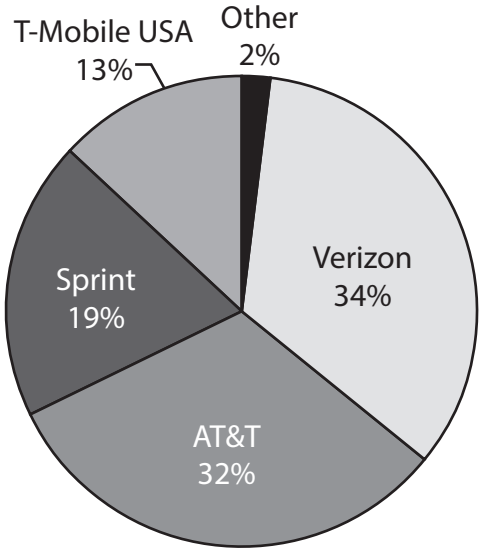
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(Total for Question 4 = 4 marks)

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)

(Total for Question 5 = 4 marks)

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6 A bowl of freshly cooked noodles in a Thai market costs 30 baht before 6pm and 60 baht after 6pm every day. What economic reasoning best explains this price change?

(1)

A The demand for noodles is more price inelastic after 6pm

B The cost of making noodles falls after 6pm

C Before 6pm the firms have a high degree of market power

D Firms supplying noodles in this market are aiming for allocative efficiency

E Noodles bought before 6pm can be resold in the same market after 6pm

Answer ☐

Explanation

(3)

(Total for Question 6 = 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

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(Total for Question 7 = 4 marks)

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8 In 2014 the UK Government announced that there would be a change in the price cap on regulated rail fare increases. The price cap changed from RPI + 1% to RPI + zero. Assuming RPI changes are positive, regulated rail fares will

(1)

A rise by 1% in nominal terms

B rise by 1% in real terms

C remain unchanged in nominal terms

D remain unchanged in real terms

E fall by an amount equal to the changes in RPI

Answer ☐

Explanation

(3)

(Total for Question 8 = 4 marks)

TOTAL FOR SECTION A = 32 MARKS

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QUESTION 9 BEGINS ON THE NEXT PAGE.

SECTION B

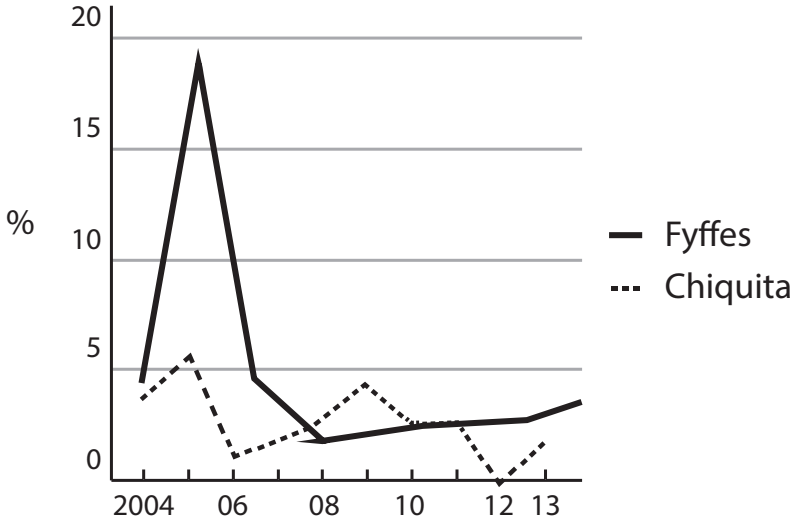
Answer EITHER Question 9 OR Question 10.

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

You should spend 55 minutes on this section.

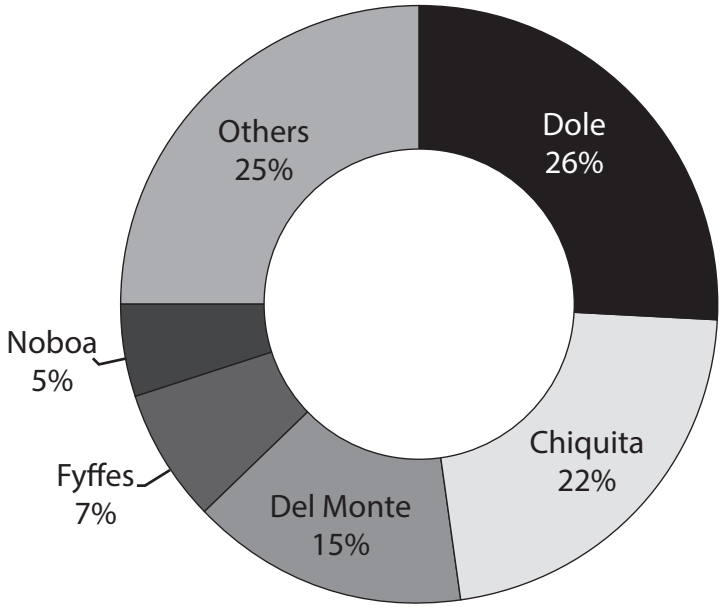
9 Bananas

Figure 1 Fruit importers' profit margins, %



(Source: http://www.ft.com/cms/s/0/8537646e-a85b-11e3-8ce1-00144feab7de.html#axzz3SqiJkq3q)

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.

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."

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.

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.

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)

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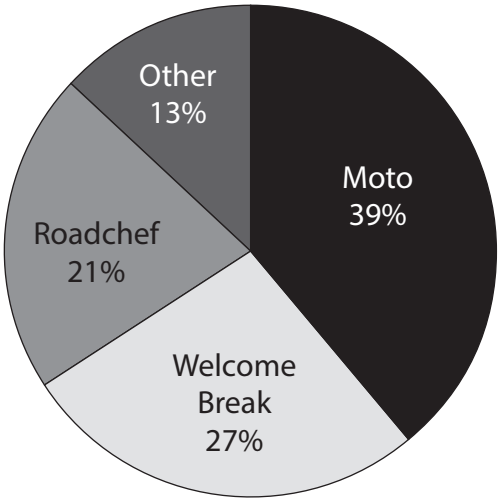
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QUESTION 10 BEGINS ON THE NEXT PAGE.

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)

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.

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.

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.

(Source: adapted from 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.

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.

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?'

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

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

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Mark Scheme (Results)

Summer 2016

Pearson Edexcel GCE in Economics (6EC03) Paper 01 Business Economics and Economic Efficiency

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General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

Please note we are introducing 'drag and drop' annotations to the sampling process for this session. When you enter the annotation screen you will able to toggle between a number of options. These will be short abbreviations for longer phrases. Please drag the relevant option (by holding down the right mouse button) and then dropping it onto the relevant part of the script. This shows your Team Leader where you have awarded your marks and lead to you being passed to mark more quickly.

The options are below:

Option	Meaning
NR	Not Relevant
OMS	Outside Mark Scheme
BOD	Benefit of Doubt
QWC	Quality of Written Communication
ILL	Illegible
AP	Application
KAA	Knowledge, application & analysis.
EV	Evaluation
2CAP	Cap the multiple choice question at 2 because the key is wrong
RPT	Repeating a point already made so do not award again

General marking guidelines 6EC03 Supported Choice Questions

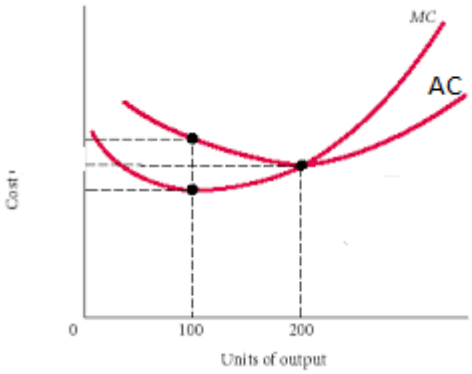
Maximum score: if an incorrect key has been chosen, the maximum score is 2 out of 4.

Knocking out incorrect options:

Incorrect options can be knocked out, if relevant economic reasoning is given, for 1 mark each time. Up to two knock out marks can be awarded for each supported choice question. If more than one key is knocked out for the same reason this will earn one mark only.

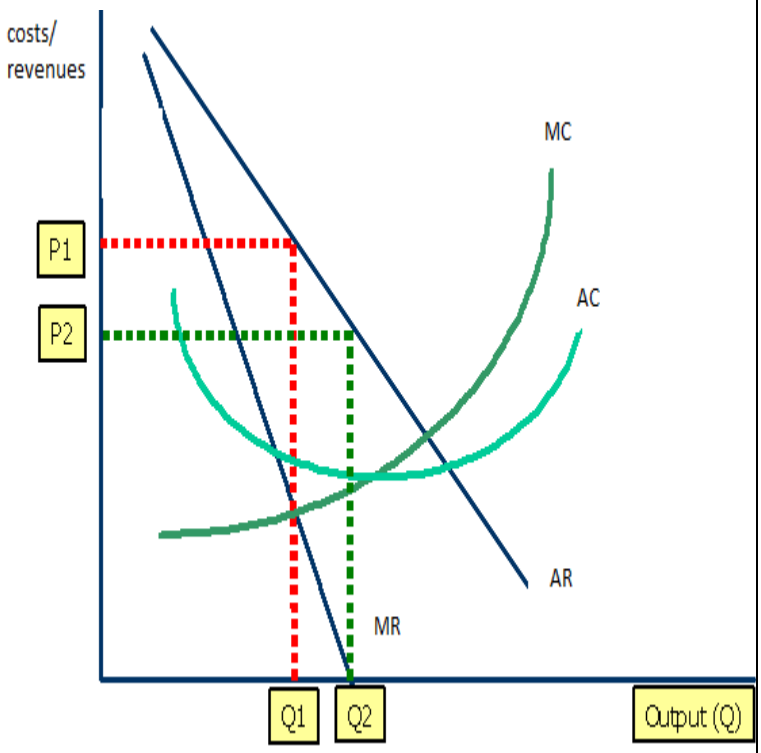
Knock out marks are **not** awarded if the reasoning is that 'it's not A because it is B' – there must be some valid ***economics rationale*** to the answer in order to earn a mark.

Question Number	Answer	Mark
1	Key: D	**(1)**
	Vertical integration – merging with firms at different stages of the production process (1) Backwards – towards the raw materials (1) Application to context/benefits to Rolls Royce, e.g. full control, cutting out the mark up (1) why engines are previous stage of production (1) Knock out of incorrect options up to 2 marks available. For example: It is not B because it is not merging with a firm at the same stage of production (1) It is not C because this would have involved buying a business at next stage such as car sales dealership (1)	**(3)**

Question Number	Answer	Mark
2	Key: E	**(1)**
	Definition/formula of marginal (cost of producing one more unit) **or** average cost (1) Explanation that if marginal cost is below average cost it pulls down the average cost (1). Explanation of the short run, e.g. there is at least one fixed factor or there are fixed costs (1). Rising marginal costs means that the law of diminishing returns has set in(1) Diagram illustrating range where MC<AC (1) with MC rising while AC falling clearly demonstrated (1) with arrows or sections of the curve marked as follows:  Knock out of incorrect options up to 2 marks available. For example: A is wrong as economies of scale occur in the long run where more factors of production can be changed (1) Not B as the rising marginal costs imply diminishing returns have set in (1) Not C because there will be fixed costs, with examples or definition of fixed costs (1)	**(3)**

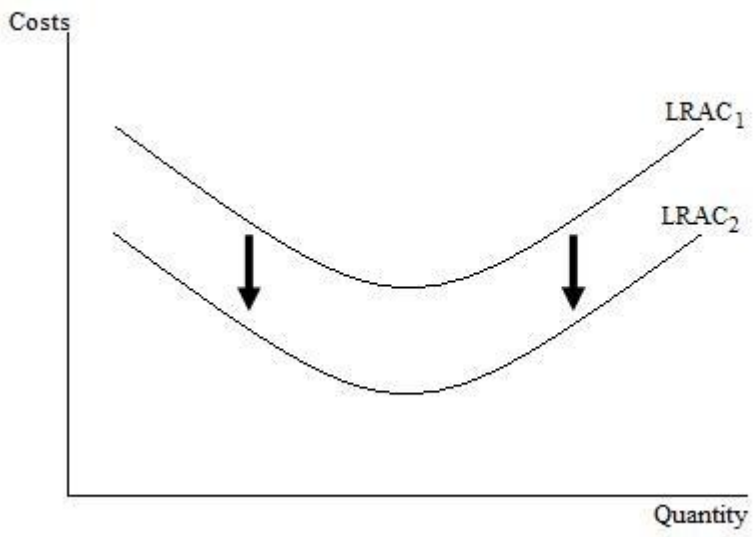
Question Number	Answer	Mark
3	Key: E	**(1)**
	Definition of normal profit (1) e.g. AR=AC or TR=TC or making just enough profit to keep factors in their current use. Award 1 mark for correct calculation of the columns and filled in up to at least 5 units, for TC (1) AR or MR (1) MC (1) or total profit if added (1). Observation that MC=MR is profit maximisation (1) The firm is a price taker, or faces perfectly elastic/horizontal demand (1) The firm makes normal profits where AR=AC in the long run (1) Defining characteristic of perfect competition, if not included above, e.g. very many firms in the industry, perfect knowledge, no barrier to entry or exit, homogeneous product (1) Diagram showing price taking firm, or perfect competition firm with industry diagram determining the price (1) Total revenue is increasing at a constant gradient indicating firm is a price taker (1) Knock out marks: e.g. it is not A because this is a price taker with horizontal demand curve whereas monopolistic competitor would have downward sloping demand curve due to differentiation (1) D is wrong because £3 loss is made at 3 units	**(3)**

Output per day	Total revenue (£)	Average revenue/Marginal revenue (£)	Total cost (£)	Average cost (£)	Marginal cost (£)
0	0	-	12	-	-
1	10	10	22	22	10
2	20	10	28	14	6
3	30	10	33	11	5
4	40	10	40	10	7
5	50	10	50	10	10
6	60	10	81	13.5	31

Question Number	Answer	Mark
4	Key: B	**(1)**
	Firm has monopoly power or is a price maker (1). Revenue maximising occurs at MR=0 (1). A change to profit maximising means MC=MR (1) and MC is positive because there are at least some variable costs or MC>0 (1). Use of diagram to illustrate these points, up to 2 marks. **NB** diagram must include correct change in P and Q based on correct equilibria (1+1) e.g. where P1 Q1 is profit max (1 mark) and P2Q2 is revenue max (1 mark):  	**(3)**

Question Number	Answer	Mark
5	Key: E	**(1)**
	Oligopoly definition, e.g. a few firms dominate the industry (1) Interdependence (1) Explanation of a price war, e.g. firms react to another firm's price cuts by cutting their own prices (1) Use of data to demonstrate that some firms dominate, e.g. Verizon has 34%, or use of a concentration ratio e.g. the 4-firm CR is 98% (1) Reasons why a price war is likely to occur (1+1). This might be developed using game theory: Use of pay off matrix to show short term reasons for a price war e.g. short term gains by under-cutting rival (1) and the effect, e.g. both firms lose revenue(1) Kinked demand curve (1) if interrupted MR curve is illustrated (1) Knock out of D: if (kinked) demand were relatively inelastic in relation to a price cut then this would be a reason NOT to lower price (1)	**(3)**

Question Number	Answer	Mark
6	Key: A	**(1)**
	Knowledge mark: **price discrimination** is occurring **or** definition/formula of PED (1) Explanation: When demand is relatively inelastic, price can be raised without significant loss of revenue/demand is unresponsive (1) Two sub-markets have been identified with different elasticities, which is a condition of price/product discrimination (1) Reasoning for higher/lower PED, e.g. there is more choice before 6pm, or people who have been working have higher incomes to spend than the people who can eat out during the day (1+1) Use of **diagram** to illustrate relatively elastic demand before 6pm and relatively inelastic demand after 6pm (1 mark for correct elasticities, 1 mark for correct prices **in each sub-market**) Knock out of E: It cannot be E because if arbitrage is possible then price discrimination is not possible (1)	**(3)**

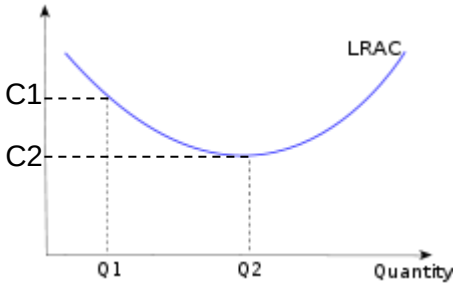
Question Number	Answer	Mark
7	Key: A	**(1)**
	Definition of **external** economies of scale (1) e.g. benefits to a firm when an industry as a whole grows, or geographical location improves, or benefits of being a large firm while still being a small firm Increasing number of firms suggests firms are being attracted to the industry (1) Firms are likely to be small and benefit from large industry rather than being large themselves (1) Low barriers to entry (1) Profits are acting as a signal to entry (1) Application (1) to likely external economies which might arise in this context – e.g. knowledge sharing, skilled local computer technicians, improved local infrastructure such as super-fast broadband, use of data to show increase in industry size Diagram (1) AC accepted:  	**(3)**

Question Number	Answer	Mark
8	Key: D	**(1)**
	Definition of a price cap, e.g.: a price cap limits the amount by which firms can increase prices (1) Role of regulator (1) e.g. a surrogate for competition Reason for or function of a price cap (1) e.g. to prevent monopoly exploitation/higher prices, or to stop prices rising more than a certain amount RPI+k or 1% explanation (1) e.g. to allow firms to invest in rail infrastructure Explanation that **real** terms have had the effects of inflation removed, that is, the RPI element is in the equation so that the inflation impact can be ignored (1) Explanation that **nominal** terms means current prices, or that prices are rising in line with inflation (1) The reduction in price cap means that the rail operating companies have less scope for raising prices (1) The price cap increases consumer surplus at the expense of producer surplus (1) The regulator perceives that there are efficiency gains to be made/less investment to be made compared to the previous period (1) Knock out e.g. B rise 1% real terms was the annual increase in the previous regulated period not the current period (1)	**(3)**

Question Number	Answer	Mark
9a	Theory: 2 marks. Award **one** condition for up to 2 marks. 1 mark for identification and 1 mark for explanation. Conditions might include: • A powerful buyer in the market drives down the prices of supplies. Buyers are price makers. Large buyers with market power, small or competitive sellers which are price takers/low level of market power. (1+1) • Sellers do not have the power to determine prices. Sellers are price takers. Firms selling products cannot sell to other buyers. (1+1) • There are barriers to entry for firms wishing to buy products. (1+1) Application related to monopsony: 2 marks. At least one mark must relate to the data provided in Extract 1. Sense of large powerful supermarkets buying power: The middlemen or distributor's profits are being squeezed to 3% (1), distributors' price squeeze (1) and mergers of distributors are necessary to ensure the firms' survival (1) supermarkets are so powerful that can now source direct (1) producers/distributors have had to absorb cost increases (1) bananas often sold as loss leaders (1) Sense of many producers: Global banana production has doubled Ext.1 (1) there are lots of sellers e.g. Extract 1 'more competitive than ever' (1) Sense of large powerful buyers (distributors): Dole has 26% of market of distributors (or similar from Fig. 2) Deal to create largest biggest distributor (1) $1bn merger (1)	**4**

Question Number	Answer	Mark
9 (b)	KAA 4 marks (2+2 or 3+1 for effects, plus application marks) Award the best two effects. Effects might include: • Monopsony forces down prices. Distributors cannot make significant profits • Consumers have lower prices • Supermarkets may bypass the distributors by going straight to suppliers with consequent effect on distributors. • Distributors have to merge, cut costs, diversify, collude, merge to stay in business e.g. Chiquita and Fyffes (might count as 2 points) • Diagram may be awarded but not required (1+1) one mark for correct movement and one mark for impact Evaluation 4 marks (4+0 or 2+2 or 3+1) Points might include: • Fair Trade (synoptic element) • Consumers might be faced with less choice or higher prices in the long run • Mergers will enable banana distributors to fightback • has been made worse by costs increasing at the same time • compounded by other factors making it worse for them • depends on what else they distribute e.g. melons and pineapples Extract 1 • SR v LR - situation could improve in the future • SR v LR - market could become more regulated to improve the situation	**(8)**

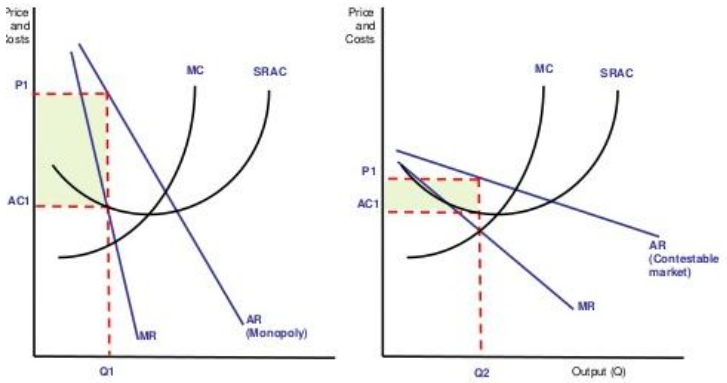
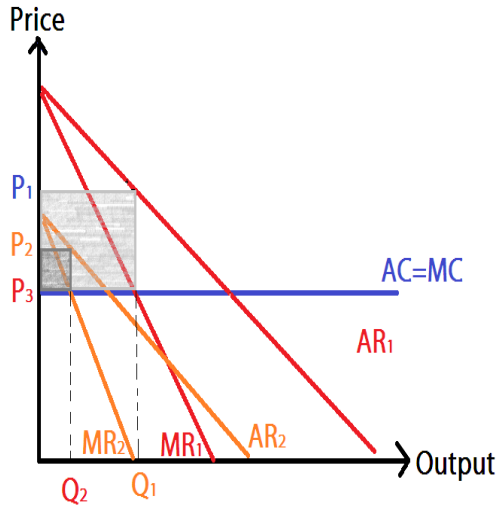
Question Number	Answer	Mark
9 (c)	Role of regulator (1) (might be implicit) KAA 6 marks Award up to 3 problems. (2+2+2) or (3+2+1) or (4+2) Problems regulators might fact might include: • Asymmetric information, especially in a worldwide market. • Regulatory capture • Regulatory lag • Hard to prove illegal behaviour (might just be good business sense/barriers to entry are high) • International market – different authorities which might lack the power to investigate in other countries e.g. Dublin and US • Lack of accurate information on how the market will develop and how much power the newly formed firm would have • Costs of regulation, including opportunity cost • Weak power of regulators • Fines do not act as a deterrent Evaluation 6 marks (2+2+2) or (3+2+1) or (4+2) Award up to three evaluation points, which might include: • Reasons why regulation might be easy, e.g. regulatory powers have increased in recent years, symmetric information • Regulatory capture can be overcome, e.g. by fines, precedence, media coverage • Not much need for regulation e.g. because the market is providing effective competition or there are economies of scale – is it the distributors or the supermarkets at fault? • Regulation acts as a deterrent even if it does not have a direct effect • The threat of regulation is as much of an effective tool as the regulation itself (and probably the main reason this particular merger did not go ahead, although of course candidates would not be expected to know that) • The volatility of market makes it hard to decide whether profits generated are due to anticompetitive behaviour or favourable harvest • Problems of over-regulation	**(12)**

Question Number	Answer	Mark
9 (d)	KAA 8 marks Reserve 2 marks for diagram (1+1) one mark for correct movement/shift and one mark for impact The diagram can be used as part of the KAA or Evaluation or both Diagram might involve increase in AR/MR, falling in SR costs (AC or AC and MC), LRAC and a succession of SRACs (envelope curve) or a simpler version of economies of scale, e.g.: **Costs**  Allow diagrams with constant costs, or diagram showing movement from competitive to monopoly situation e.g. showing benefit to firms such as increased profit Factors 2+2 +2 + 2 marks or 3+3 +2 marks or 4 + 4 marks Benefits to **any stakeholders** might include: • economies of scale (might count as more than one point) e.g. 'more bananas on fewer boats' means there are technical economies of scale • the merger would give distributors increased power in negotiating with the supermarkets e.g. raised profits for firms • rationalisation • shared networks • benefits of diversification e.g. melons and pineapples • cross subsidisation • increased market power in selling produce • job security for workers • increased consumer surplus • high tax revenue	

Question Number	Answer	Mark
9(d) continued	Evaluation 8 marks e.g. (2+2+2 +2) or (3+3+2) or (4+2+1+1) Factors might include negative impacts on **any stakeholder,** or other evaluation points: • Merging might lead to higher costs • Revenues might not rise • Diseconomies of scale (might be shown on diagram) – e.g. lost synergies • Fear or costs of regulation • Need more information e.g. on how other firms will react • Diagrams could be used as part of the evaluation, e.g. higher prices, lower consumer surplus • Redundancy costs • Legal costs • X inefficiency costs • Effect on workers • Impact on banana growers (monopsony) • Impact on contestability	**(16)**

Question Number	Answer	Mark
10 (a)	**Theory: 2 marks** Firms are price makers, ability to set prices without losing all demand, price discrimination, relative inelastic demand or the use of a diagram to show a downward sloping demand curve, effectively the only supplier, there's no alternative, collusion Monopoly/oligopoly – a single or dominant firm (allow 25% legal definition) **Application (at least one reference to any information provided): 2 marks** 'Profiteering' or 'inflated prices' Extract 1 'not wanted to add extra miles' Extract 1 '15p above average price' Extract 1 'it's a complete monopoly' Extract 2 'notoriously expensive' Extract 2 'captive market' Extract 2 15 miles between MSAs or over 50 miles 'like an airport or railway station' Extract 2 'goldmine' Extract 3 'generate huge amount of cash' Extract 3 Concentration ratio from Figure 1 e.g. 3 firm CR = 87% (2 marks for correct calculation) Reduced number of options – HGV drivers forced to use MSAs	**(4)**

Question Number	Answer	Mark
10 (b)	KAA 4 marks (2+2 or 3+1). Award best 2 points given. Points might include: • High fixed costs, high set up costs, legal requirements e.g. spacing between motorway services • Fall in demand as market becomes more competitive and/or substitutes improve e.g. rail fares decrease, electric cars • Discussion of short run shut down point. The firm is covering AVC but not AFC, so is making a contribution to fixed costs. A shut down diagram with price below AVC could be used to support this point. • Increase in costs/ fall in demand due to regulations e.g. toilets, limitations on products being sold • Need for investment • Debt £376 million, Roadchef 'downgraded' • Change in consumer behaviour e.g. technological changes • Diagram may be awarded but not required (1+1) one mark for correct movement/shift and one mark for impact Evaluation 4 marks (2+2 or 3+1 or 4+0) Factors might include: • The firms seem content to survive the fixed costs into the very long run (extract 3). Discussion of how long is the long run. • Several firms have had to merge • Firms can survive while making a loss because the managers are satisficing, or the firms can make an operating profit while ignoring the cost to the capital investors • Depends on the time period under consideration • Depends if the firm can cross subsidise with other services, or find other ways to make a profit e.g. charging for parking/facilities • It says 'they generate a huge amount of cash' Extract 3 so 'what does it matter' • They may leave even if AR is greater than AVC or stay if AR is less than AVC only if they are cross subsidising • The fall in profits may be temporary e.g. rail fares might rise • Factors may be combining together, not just one thing in particular	**(8)**

Question Number	Answer	Mark
10 (c)	KAA 6 marks Reserve 2 marks for diagram (1+1) one mark for correct movement/shift and one mark for impact **on profits** The diagram can be used as part of the KAA or Evaluation or both Diagram showing decrease in demand or increase in costs. For those firms exhibiting profits, or an increase in demand for those offering low prices. Diagrams could illustrate increasing PED as AR becomes more elastic, with profit area:  Or an inward shift of AR and MR, with 1 mark for the new profit/loss area.  	

Question Number	Answer	Mark
10 (c) continued	Other KAA (4) 2+2 or 3+1 or 4+0 Factors must be linked to profit might include: • Demand will become more elastic if there are clear substitutes • Reduces monopoly power of individual firms • Infrastructure costs of the signage might be a factor, in which case a firm showing increase in AC and MC would be accepted in the diagram • Collusion • Price wars • Use of pay off matrix or other game theory to show behaviour Evaluation 6 marks (2+2+2) or (3+3) Factors might include: • There are better ways to make the market more contestable, e.g. deregulation • It depends on whether the firms are exploiting monopoly pricing and charging high prices. Firms charging relatively low prices might enjoy an increase in demand • It depends on the price differential/levels of income of drivers or economic cycle. • It depends on whether new MSAs are built. In some cases there is a large gap still between MSAs. • Signage is a one off cost • Depends on how desperate the driver is • Depends on what other firms do. Game theory may be used to develop the evaluation • Collusion will change the impact • Greater reliance on non price competition • Consumer loyalty/branding/habitual behaviour may be strong enough offset the impact of price information **NB 2 marks for correct use of pay-off matrix – can be used as KAA or Evaluation**	**(12)**

Question Number	Answer	Mark
10 (d)	KAA 8 marks. Award up to 4 factors e.g. (2+2+2 +2) or (3+3+2) or (4+2+1+1). Points might include: • Reasons for growth, e.g. economies of scale, benefits of horizontal integration (might count as more than one point) • Lack of contestability. Barriers to entry might include high fixed costs (might count as more than one point) • High set up costs e.g. high-cost legal requirements • Small profit margins at low output levels. Award use of appropriate profit/cost/revenue diagrams e.g. LRAC falling • Monopoly power/power of branding/non-price competition • Collusion • Limit or predatory pricing • Other anti competitive behaviour • Minimum efficient scale • Loyalty schemes and other non-price competition such as branding e.g. M&S services might attract loyal customers • Regulations e.g. planning restrictions • Debt is a deterrent e.g. £376m Extract 3 • Maybe unattractive to potential competitors. Therefore few firms can dominate the market Evaluation 8 marks (2+2+2 +2) or (3+3+2) or (4+4). Points might include: • The firms seem content to survive the fixed costs into the very long run (extract 3) • Reasons why other firms are better when small, e.g. care service industry • Several firms have had to merge or go out of business • Diseconomies of scale e.g. are synergies possible and do dis-synergies set in? • Few opportunities to increase profits are available. • Discussion of the nature of the business e.g. minimum efficient scale • MSAs are more than 50 miles apart which is a sign of failed regulation • Risk or cost of loyalty schemes • Pay off matrix or other game theory can be used e.g. to show why collusion might not work • Arguments that economies of scale don't apply e.g. the low credit ratings of operators means that banks won't lend	**(16)**

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Write your name here

Surname	Other names

Pearson Edexcel GCE

Centre Number	Candidate Number

Economics

Advanced

Unit 3: Business Economics and Economic Efficiency

Thursday 11 June 2015 – 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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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 In 2013 the UK competition authorities forced LloydsTSB Bank to de-merge by forming two separate companies. 631 retail bank branches were rebranded as TSB, and 1 300 branches as Lloyds Bank.

Which one of the following is the most likely reason for this decision by the competition authorities?

(1)

A There are diseconomies of scale in the retail bank sector

B The level of contestability was high in the retail bank sector

C There was increased consumer surplus gained through horizontal integration

D There was a decrease in price gained through vertical integration

E LloydsTSB had a high market share in the retail banking industry

Answer ☐

Explanation

(3)

(Total for Question 1 = 4 marks)

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2 Several firms have priced tablet computers below the average cost of production. The most likely reason for this pricing policy is to

(1)

A increase diseconomies of scale

B increase barriers to entry

C create a cartel

D achieve short-term break-even output

E achieve short-term profit maximisation

Answer ☐

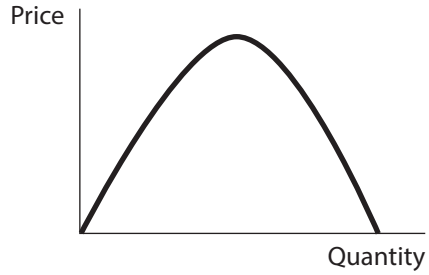
Explanation

(3)

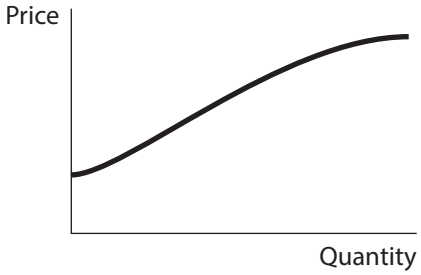
(Total for Question 2 = 4 marks)

3 Which one of the following diagrams could depict average revenue for a firm operating in a perfectly competitive market?

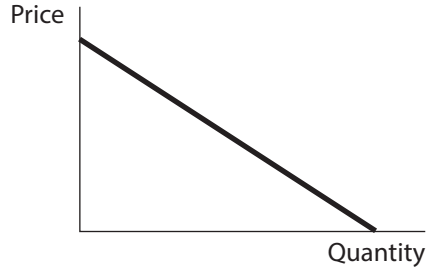
A



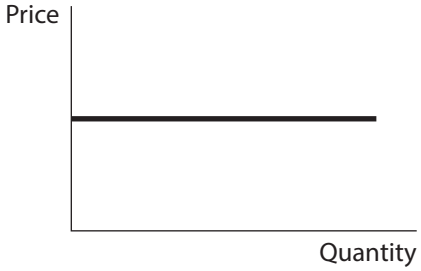
B



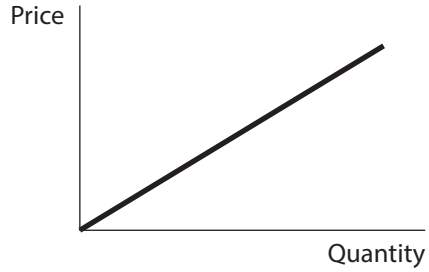
C



D



E



(1)

Answer

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Explanation

(3)

(Total for Question 3 = 4 marks)

4 Shoe repairing firms in a large city are providing similar services, and they are making normal profits. Customers tend to be loyal to certain firms. The market structure most resembles

(1)

A perfect competition in the short run

B perfect competition in the long run

C monopsony in the short run

D monopolistic competition in the long run

E oligopoly in the short run

Answer ☐

Explanation

(3)

(Total for Question 4 = 4 marks)

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5 Early in the morning on 19 September 2013, Microsoft revealed that the price of its new games console Xbox One would be £429 in the UK. Later that day, Sony announced that its new PlayStation 4 games console would be sold for £349 in the UK.

One possible reason why Sony chose to price its product significantly lower than Microsoft was because

(1)

A it had first mover advantage

B it wanted to undercut Microsoft and take a large market share

C it wanted to benefit from relatively price-inelastic demand

D it was colluding with Microsoft

E it had higher sunk costs in developing the new games console

Answer ☐

Explanation

(3)

(Total for Question 5 = 4 marks)

6 The table below gives the 4-firm concentration ratio in a selection of industrial sectors in the USA.

Sector	4-firm concentration ratio
Food manufacturing	16.8
Metal household furniture manufacturing	27.6
Motor vehicle manufacturing	81.2
Breakfast cereal manufacturing	82.1
Malt manufacturing	91.4
Guided missile and space vehicle manufacturing	95.3

(Source: US census www.census.gov/prod/ec02/ec0231sr1.pdf)

What can be inferred from this information?

(1)

A The metal household furniture sector is more concentrated than the breakfast cereal sector

B There are no barriers to entry in food manufacturing

C There are external diseconomies of scale in motor vehicle manufacturing

D Four firms have significant market power in the manufacture of motor vehicles

E The guided missile and space vehicle sector is monopolistically competitive

Answer ☐

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Explanation

(3)

(Total for Question 6 = 4 marks)

7 In December 2013, Virgin Trains quoted the following prices for a single train journey on 27 December at 07.55 hours between London and Manchester:

Passenger/ticket type	Price
Advance	£67.00
Senior citizen advance	£44.20

(1)

The most likely explanation of this pricing strategy is

A to increase revenue

B to take advantage of the lower price elasticity of demand for rail tickets of senior citizens

C that it is easy for tickets to be bought by a senior citizen and used by any passenger

D that the cost of providing seats for advance passengers is higher

E to attract the attention of the competition authorities

Answer ☐

Explanation

(3)

(Total for Question 7 = 4 marks)

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8 Network Rail is a firm responsible for maintaining the UK rail infrastructure. It faces a fine of £75 million, imposed by the Office of Rail Regulation (ORR), for failing to meet its punctuality target. Only 87% of long distance trains arrived on time in 2012–2013, missing the 92% performance target set by the ORR.

(1)

The intended purpose of such performance targets is to increase the

A quality of service where lack of competition might lead to poor results

B contestability of the market where entry barriers are high

C x-inefficiency in the industry

D producer surplus of the firm where shareholders will benefit

E government's revenue in the context of a fiscal deficit

Answer ☐

Explanation

(3)

(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 the box ☒ .

You should spend 55 minutes on this section.

9 Price fixing in the baby milk powder market

Extract 1 Soaring baby milk prices provoke price fixing claim

Firms producing baby milk powder, known as formula milk, are making huge profits on exports to China. In 2012, the total share of the top five foreign formula milk brands reached 60% of the Chinese market. A climate of panic among parents in China over the safety of domestically produced formula milk was pushing prices ever higher. The competition authorities in China have accused foreign firms of participating in a conspiracy to fix the price of formula milk. They are being investigated for alleged price-fixing and anti-competitive behaviour.

Wyeth Nutrition, which Nestlé bought in its $11.9 billion takeover of Pfizer's baby food business, is accused along with other formula milk producers of "violating anti-monopoly laws via high prices and limited market competition" by the Chinese regulatory authority, the National Development and Reform Commission (NDRC). Wyeth Nutrition has been actively co-operating with NDRC's review of the industry, a spokeswoman from Nestlé said.

Parents, fearful that the local formula milk products may be counterfeit or otherwise tainted, go to extreme lengths to buy imported formula milk. This follows the scandal in 2008 when melamine, in domestically produced formula milk, killed six babies and caused sickness in 300 000 others. A tin of foreign-made formula milk that sells for £10 in Britain retails for as much as £30 in China. A flourishing black market has led to tins of milk powder being smuggled in from Europe and sold online. Prices have risen by 30% since 2008. "People are willing to pay that amount for a product from a brand they trust to have better safety, particularly when it involves children and babies," said James Roy, a senior analyst. He said that consumers are unhappy and that the government is responding by exerting pressure. He thought it unlikely that the companies were engaging in real price fixing.

(Source: *The Times,* 3 July 2013)

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Extract 2 Fines on foreign formula milk producers

China has temporarily banned some imports of formula milk. In August 2013, China's price regulator imposed fines equivalent to £71 million on five foreign formula milk producers following an investigation into price fixing.

Analysts said the investigation into formula milk pricing was part of a broader Chinese plan to boost consumption of local formula milk products. But they said the fines were unlikely to damage the reputation of the affected companies. If anything, foreign formula milk producers might increase their market share because of the price cuts resulting from the investigation.

"It will have an impact on domestic brands over the long term as the prices of high-end premium brands come down. Customers will tend to buy the foreign brands as the price gap between domestic and foreign brands narrows," said Jacqueline Ko, an analyst at Maybank Kim Eng Research.

Fonterra, one of the companies fined, said it would give additional training to sales staff and review its distributor contracts in the wake of its fine. "We believe the investigation leaves us with a much clearer understanding of expectations around implementing pricing policies," said Kelvin Wickham, a senior executive of Fonterra.

"There have been some small [price-fixing] cases previously, but nothing of this scale," said one lawyer who defended a company involved in the investigation. "There is real political momentum behind this. Inflation and product safety are at the top of the government's agenda." As China's economic growth rate threatens to slow below the official target of 7.5%, the Chinese government is concerned about growing public anger over the price and quality of essential goods and services such as formula milk.

(Source: http://uk.reuters.com/article/2013/08/07/uk-china-milkpowder-idUKBRE97602U20130807 and China fines milk formula makers in pricing probe http://www.ft.com/cms/s/0/d40bda56-ff06-11e2-97dc-00144feabdc0.html?siteedition=uk#axzz2g1t7sgtP)

Extract 3 Chinese government to give $4.9bn to domestic formula milk producers

Chinese formula milk producers, including Inner Mongolia Yili Industrial Group and China Mengniu Dairy, are set to get 30-billion yuan ($4.9 billion) in official funds to support mergers. The plan is to reduce the number of domestic formula milk producers in the highly fragmented market over the next five years from 200 to 50. This will create stronger sector leaders to increase the ability of companies to compete with international rivals who dominate the premium end of China's $12.4bn formula milk market.

Chinese formula milk firms would gain the support in the form of government subsidies, funds from China Development Bank and favourable tax policies, the China Business Journal said. The total amount would be about 30-billion yuan, it said.

(Source: http://www.bdlive.co.za/world/asia/2013/09/23/state-to-give-chinese-milk-powder-makers-4.9bn, September 23 2013, 09:05)

(a) With reference to Extract 3, explain the type of integration involved between domestic formula milk producers in China.

(4)

(b) With reference to Extract 3 and your own knowledge, examine the likely impact of government subsidies on the profits of Chinese formula milk producers.

Use a cost and revenue diagram in your answer.

(8)

*(c) Discuss why 'price-fixing and anti-competitive behaviour' by foreign formula milk producers in China may have been possible (Extract 1, line 7).

(12)

*(d) Evaluate the likely impact of the '£71 million' fines (Extract 2, line 2) on the price and availability of high quality formula milk.

(16)

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(16)

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(Total for Question 9 = 40 marks)

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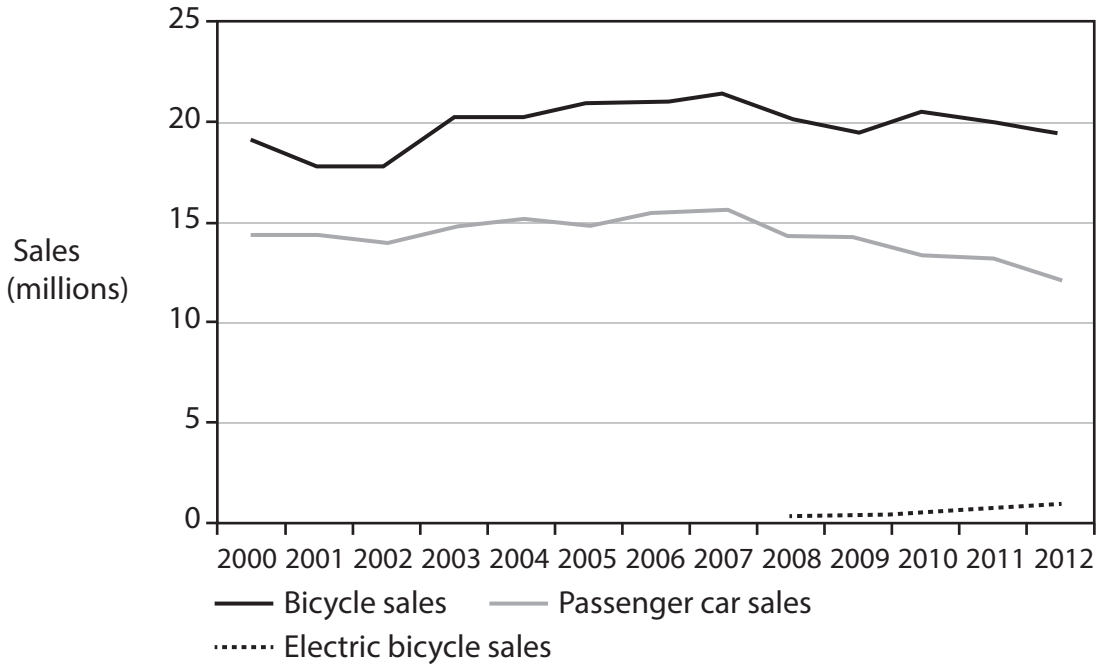
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QUESTION 10 BEGINS ON THE NEXT PAGE.

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

10 Electric bicycles (e-bikes)

Figure 1 EU trends in Bicycle sales, passenger car sales and electric bicycle sales



Extract 1 Changing trends in private car and bicycle use in the EU

Electric bicycles (e-bikes) use batteries to add to a rider's own efforts with top speeds of up to 40kph.

Navigant Research, a market research company, sees trends that would suggest a possible correlation between increasing sales of e-bikes, as well as rentals, and declining car sales.

For every car sold in the EU, almost two bicycles are sold. E-bike sales are growing by 22% a year while car sales are declining by 2%.

The market for e-bikes is likely to grow to between 1.0 million and 1.2 million units in 2013. But the question remains: does this mean that Europeans are shunning cars for bicycles and e-bikes?

(Source: http://evworld.com/news.cfm?newsid=30212)

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Extract 2 Downhill all the way

Electric cars are expensive and they stop dead if not recharged. These problems explain why the demand for electric cars remains low. E-bikes on the other hand can still be pedalled without a charged battery and are increasingly affordable. Faster e-bikes with more sophisticated electronic controls, such as those popular in China, may also be gaining ground.

In the Netherlands one bicycle in six sold is an e-bike. In Germany the cycle industry expects e-bike sales to grow by 13% in 2013, to 430 000 and to account for 15% of the market. In France sales of traditional bicycles fell by 9% in 2012 while those of e-bikes grew by 15%.

As more people move to cities, e-bikes are catching on, helping to reduce problems of parking, transport costs and global warming. China buys most of them and makes even more, with European sales of 1.5 million in second place. The global market is expected to be 40 million in 2015.

(Source: http://www.ft.com/cms/s/0/9ecf3158-e536-11e0-bdb8-00144feabdc0.html#ixzz2glhjny30)

Extract 3 Global electric bike sales in high gear

Growing e-bike sales are turning bicycle manufacturers, long viewed as unexciting companies, into firms worth investing in. The market for bicycles has been mature for years. That started to change in 2008, as the new generation of e-bikes was launched. The smaller batteries and attractive designs began luring older customers away from push bikes.

"Over 90% of e-bike sales are to people over age 50, but I see the age slowly coming down, and more men buying," said Karel van Waselaer, CEO at Gazelle, a Dutch manufacturer. While there are e-bike specialists, such as Switzerland's Biketec and Germany's Sachs, most traditional brands are coming out with e-bike lines as well, for example, the major US bicycle manufacturer Cannondale introduced its own e-bike line in 2013.

E-bike specialists have not yet begun to squeeze out small competitors on price, largely because almost all brands source their electrical components such as batteries from the same few suppliers, chiefly Shimano of Japan and Germany's Schramm. "The battery is 25% of the total price of the e-bike," said Patrick Langley of industry research firm GFK.

(Source: http://www.ft.com/cms/s/0/9ecf3158-e536-11e0-bdb8-00144feabdc0.html#axzz2glcm2lAW)

(a) With reference to Extract 3, explain the market structure of batteries used in the manufacture of e-bikes.

(4)

(b) With reference to the information provided, examine the likely impact of the increase in demand for e-bikes on the profits of bicycle manufacturers.

Use a cost and revenue diagram in your answer.

(8)

*(c) With reference to the information provided, discuss pricing and non-pricing strategies that e-bike manufacturers might use to increase sales.

(12)

*(d) Discuss the level of contestability in the e-bike market.

(16)

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(Total for Question 10 = 40 marks)

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

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edexcel

Mark Scheme (Results)

June 2015

GCE Economics (6EC03/01)

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General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

General marking guidelines 6EC03 Supported Choice Questions

Maximum score: if an incorrect key has been chosen, the maximum score is 2 out of 4.

Knocking out incorrect options:

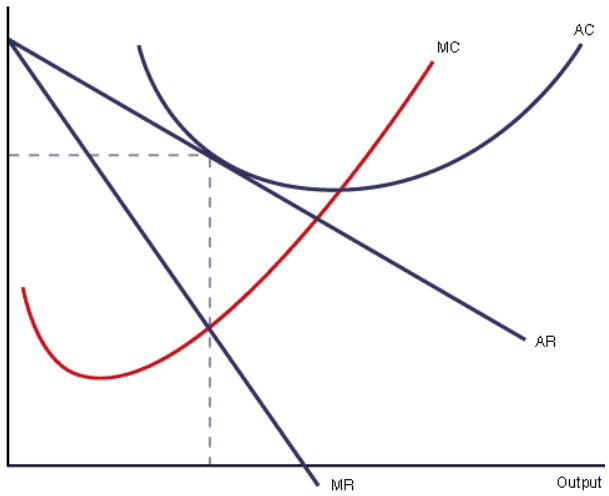
Incorrect options can be knocked out, if relevant economic reasoning is given, for 1 mark each time. Up to two knock out marks can be awarded for each supported choice question. If more than one key is knocked out for the same reason this will earn one mark only.

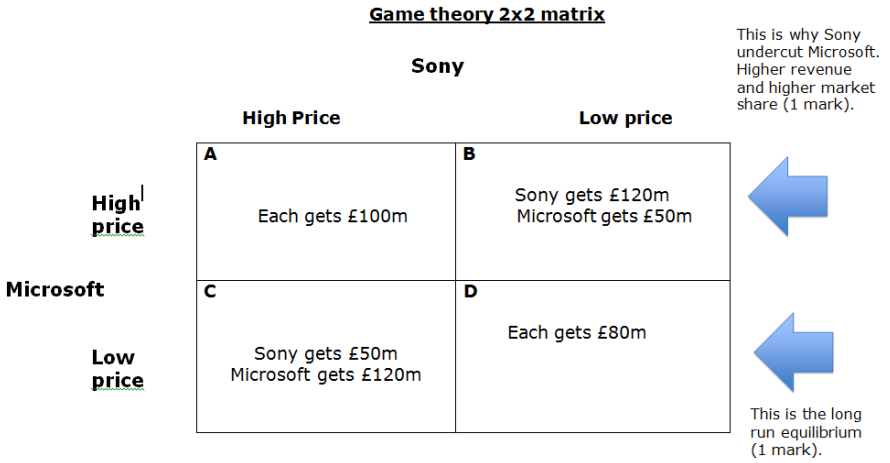
Knock out marks are **not** awarded if the reasoning is that 'it's not A because it is B' – there must be some valid ***economics rationale*** to the answer in order to earn a mark.

Question Number	Mark scheme	Mark
1	Key: E	1
	Definition of market share or high market share (1) Explanation of a demerger beyond 'form two separate companies' (as this is in the question), for example, break up of monopoly, reduce dominance in market (1) Reasons for competition authorities to act/firms may have been exploiting their high market power (hence the need to break them up) (1+1) e.g. to reduce monopoly power, increase contestability, to increase choice, lower prices, reduce inefficiency/x-inefficiency, diseconomies of scale Application to data (1) e.g. Lloyds will compete on the High St with TSB to offer lower prices/better service Role of competition authorities (1) e.g. to protect the consumer, promote competition, act as a surrogate for competition *Example of knock out marks:* *It is not A because a rise in LRAC (diseconomies of scale) is an issue the bank might want to address because of falling profits, but it is not likely to have a damaging effect on the consumer so intervention unnecessary (1)*	3

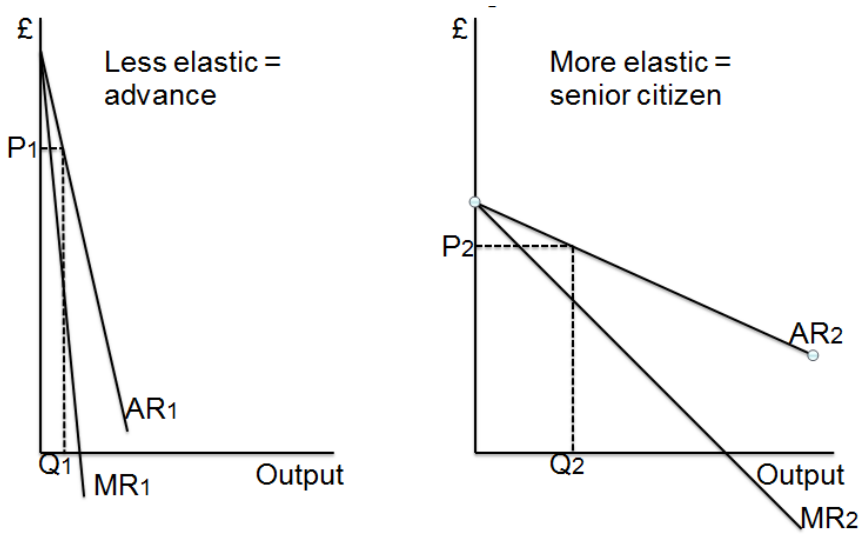
Question Number	Mark scheme	Mark
2	Key: B	1
	Definition of barrier to entry (1) e.g. an obstacle used to prevent new firms entering an industry Outline of how **predatory** pricing works (1) e.g. by making short term **losses** to force out firms Concept of predatory or limit pricing can apply to barriers to entry and **keeping competition out** (1) Firm makes a **loss** (1) which might be shown on a diagram (AR>AC over a quantity) Other diagram marks: allow limit pricing if firm is pricing below AC of ***other*** firms (1) **Long run** benefits or costs to firm (1) e.g. low prices prevent new firms from entering, higher profits for firms Illegal or anti-competitive (1) *Example of knock out marks:* *It is not C because a cartel is when firms act together as if they were one firm, and this would mean they do not have to undercut other firms*	3

Question Number	Mark scheme	Mark
3	Key: D	1
	Definition of average revenue (1) e.g. TR/Q or demand or price Characteristic of perfect competition (1) e.g. many firms, no firm has market power, identical products The firm is a **price taker** (unless awarded above) (1) Perfectly elastic, horizontal or constant demand (unless awarded above) (1) Diagram showing total revenue (diagonal straight line passing through the origin) (1) or market diagram S and D determining price for an individual firm (1) *Example of knock out marks: It is not A because this shows the shape of the total revenue for a price making firm (1)*	3

Question Number	Mark scheme	Mark
4	Key: D	1
	Definition or characteristics of monopolistic competition (1) *e.g. low or no barriers to entry or exit, slightly differentiated products, non-homogenous* Function of supernormal profits in terms of entry (1) e.g. profits attract new entrants Normal profits are made in the **long run** (1) e.g. supernormal profits are eroded or competed away Application to context (1) e.g. shoe repair services are very cheap to set up and very little equipment or training is required Explanation that **normal profits** are where AR=AC or TC=TR or 'just enough profits to keep resources in their current use' (1). Diagram showing AC=AR (1) (if not awarded above as a written definition of normal profits), where MC=MR and AR is downward sloping (1): Revenue or costs (£)  Also award normal profit as TC=TR (verbal or on TR/TC diagram). *Example of knock out marks: It is not C because in the short run, before other firms can enter or leave the industry, supernormal profits (or losses) can be made (1)*	3

Question Number	Mark scheme	Mark
5	Key: B	1
	Explanation: Market share defined (1) e.g. the proportion of the sales relative to other firms Identification of first mover **dis**advantage (1) e.g. because Microsoft moves first it is at a disadvantage Undercutting prices as a way to increase sales (1) The goods are fairly close **substitutes** (1) Firms are **interdependent** (1) Pay off matrix (up to 2 marks) e.g. showing Sony benefitting from lower price (top right box) (1) Microsoft and Sony worse off (bottom right box) in long run equilibrium (1)  *Example of knock out marks:* *It's not C because demand is relatively elastic in the short term, or the firm would lose revenue (1)* *It's not D because if they were colluding they would have sold at the same price*	3

Question Number	Mark scheme	Mark
6	Key: D	1
	Definition or formula for concentration ratio (1) e.g. the largest 4 firms have x% of market power It is an **oligopoly** (1) Highly concentrated (1) e.g. a figure above 50% would indicate strong power Explanation of market power (1) e.g. firms can influence market price without losing a high proportion of sales Relation or application to industry (1) e.g. there are reasons why **car** industry might be hard to operate in a more competitive scenario **or** 81.2% (within 1% range) of breakfast **cereal** market served by 4 main firms The implications of the market power (1) e.g. higher prices, the firms might collude *Example of knock out marks:* *It is not B because food retailers have high sunk costs in establishing trusted brand names*	3

Question Number	Mark scheme	Mark
7	Key: A	1
	Revenue definition (1) e.g. money is coming into the firm, PxQ, turnover, value of sales Identification that this is **price discrimination** (1) Application to context (1) e.g. the senior citizen has a higher PED and is therefore not prepared to pay as much, or there are customers who have different elasticities because they have more free time Higher prices where demand is relatively inelastic on diagram or verbally (1) (see below left diagram, MR is not needed for the mark) Lower prices where demand is relatively elastic (1) (see below right diagram, MR is not needed for the mark)  Main conditions for price discrimination (1) e.g. low or no arbitrage, separate sub markets with different elasticities *Example of knock out marks:* *It is not C because arbitrage makes price discrimination impossible*	3

Question Number	Mark scheme	Mark
8	Key: A	1
	Definition of performance targets (1) e.g. a level of quality of service that must be met or the firm will be fined, goal for a firm set for the firm, standard of service expectation, objective set for the firm Function of performance targets (1) e.g. they act as a surrogate for competition, or an incentive to become efficient because there is no competition, or to improve customer service Reasons why the **fine** was needed (1) e.g. x-inefficiency arising from lack of competition /monopoly power reducing incentives restores motivation/deterrent Impact of the fine (1) e.g. acts as a warning to other firms to meet their performance targets Application or example (1) e.g. punctuality of trains is 87% or intended to be 92%, or 5 percentage points below target Problems of efficiency in monopoly identified in diagram (1) e.g. AC rising for x-inefficiency Role of the regulator/ORR (1) e.g. surrogate for competition, promote consumer interests (not increase competition in this case) *Example of knock out marks:* *Not D because a performance target is likely to decrease profits because costs rise*	3

Question Number	Mark scheme	Mark
9a	**Theory (2)**: Horizontal integration (1) with firms merging at the same stage of a production process or same product or firms are making the same type of product (1) increasing market share (1) **Application (2)** Chinese firms merging reduced the number of firms (1) from 200 to 50 (1); the firms are all producing baby milk powder (1); Inner Mongolia Industrial Group and China Mengniu Dairy supported in their merger (1); 30bn yuan or $4.9bn (1); increased ability of Chinese firms to compete with/drive away international rivals (1) NB if the answer is 'vertical integration' then award no marks for theory, but application can still be relevant, e.g. government supporting baby milk suppliers	4

Question Number	Mark scheme	Mark
9b	KAA 2 marks + 2 marks reserved for diagram Subsidy defined (1) and explained (1): the subsidy is given to the firms, which implies costs are effectively reduced Effect on profits: they will increase (1) Diagram 2 marks: • 1 mark for **shift** linked to new output (MC=MR). See below at * for shifts allowed. • 1 mark for **larger profit** or **smaller loss area**, and cost and revenue curves. *The new/final area must be shown.* *MC and AC shift (implied subsidy per unit of milk) if it is made clear that variable costs are falling *with link to the new output* or *AC shift (if just a lump sum to each producer) if it is made clear that fixed costs are falling *with link to the new output* Allow TR/TC diagrams also with TC shift down and increased distance between TR and TC. [AR and MR shift outwards **only** if subsidy is given to consumers that is, a consumption subsidy e.g. vouchers given to parents - although not implied in the data] Evaluation (4) Award as 2+2 or 3+1 or 4+0 marks. Factors might include: • consideration of the limitations of subsidies e.g. opportunity cost, x-inefficiency • long run benefits e.g. economies of scale • subsidies are for mergers (Extract 3) and these might have increased costs, e.g. diseconomies of	8

	scale • Chinese firms cannot overcome the brand loyalty to foreign brands- so no guarantee of increased sales for domestic firms • depends on the size and duration of the subsidy e.g. 30 billion yuan • depends on whether or not the subsidy is passed onto consumers in terms of lower prices or kept within firm to develop products or for shareholders benefit e.g. the PED of consumers is low • subsidy is small in relation to costs of firms – not enough information to say for certain • profits are still dependent on belief in Chinese firms and effectiveness of international brand loyalty • is the subsidy linked to output? This might question whether the subsidy shifts MC and AC or just AC.	

Question Number	Mark scheme	Mark
9c	KAA 6 marks 3 x 2 marks or 2 x 3 marks Definition of price-fixing/collusion/anti-competitive behaviour (1) e.g. holding prices above competitive prices Example of anti-competitive behaviour (1) e.g. £30 per tin of milk in China compared to £10 in Britain Reasons why this behaviour might occur might include: • High market share of Wyeth and Nestlé, or 5 brands cover 60% of the market, so easy to maintain prices, or powerful brand names • Low PED because of safety concerns for babies • Weak competition authorities e.g. governments might focus on other issues, regulatory capture as the Chinese government gains large tax revenues/foreign funds • XED of domestic products, lack of substitutes domestically • Firms can communicate well/trust each other so they can collude easily. Game theory might be used.	12

	Evaluation 6 marks 3 x 2 marks or 2 x 3 marks **This might be points that anti-competitive behaviour is difficult, or other evaluation points.** • 5 international firms is a high figure if trying to coordinate collusion/60% market share is not enough to fix prices • PED is not so inelastic, e.g. black market in formula milk • Tacit collusion may be occurring (hard to prove) • Risks of whistleblowing e.g. game theory might be used to show it might or might not be worth colluding • Problems of colluding e.g. game theory might be used to show there could be a breakdown of trust in the long run • Degree of regulation, e.g. regulators are getting stronger, consideration of the size of fine £71m, increasing role of the NDRC gains power • Might be a kinked demand curve so not actually collusion/price fixing e.g. Ext. 1 James Roy says it was unlikely it was 'real price fixing' • Discussion of changes in Chinese market or government decisions over time e.g. if new Chinese competitors enter the market their reputation or quality might improve, or undercut international prices • Discussion of collusion criteria that do not hold e.g. low barriers to entry	

Question Number	Mark scheme	Mark
9d	KAA 8 marks e.g. 4 + 4 marks, 3 + 3 + 2, 2 + 2 + 2 + 2 **Link to price or availability of high quality milk must be given.** Impact of the fine might include: • fines will reduce profit so price/availability might change • prices will rise if costs rise e.g. more training costs (Ext 2 para 4) in order to prevent this happening again	16

	• prices may fall if the market becomes more competitive • it will act as a disincentive, either to collude or to invest in the industry • curtail growth of international firms, • government can use revenue of fines to subsidise local firms or give vouchers to consumers • more smuggling might occur • risk to babies of increased use of domestic milk? Reduced availability of high quality milk forces consumers to opt for domestic substitutes • firms may be forced to cut costs e.g. for quality for checks • impact on markets outside China e.g. British consumers have more access to formula milk as exports fall (Ext. 2 para 1) • foreign firms might pull out of China • fines on foreign firms may give Chinese firms a gap in the high quality milk market Evaluation 8 marks e.g. (4 + 4) or (3 + 3 + 2) or (2 + 2 + 2 + 2) Evaluation points can be the reverse of the above points. Other points might include: • Consideration of the size of the fines in relation to the profits made e.g. the impact may not be significant or not at all • Prices might fall (or the reverse of the above) e.g. as more firms enter the more contestable market • The firms might become more dominant as only the large firms can bear the fines e.g. the mergers make the market more concentrated • Consideration of the very low PED for consumers who had only been allowed one child under government rules e.g. the fines will not stop people buying the milk	

	• Better ways to control the level of foreign imports, e.g. trade barriers as an alternative way to keep foreign imports out, unlikely to affect their image as in such high demand • Fines alone do not improve domestic provision e.g. it depends on whether the money from the fines is reinvested into Chinese production of milk powder	

Question Number	Mark scheme	Mark
10a	**Theory 2**: Monopoly/oligopoly/duopoly (1); explanation e.g. where a few firms dominate the industry (1) or interdependent (1) or dominant sellers/legal definition 25% or more market share or highly concentrated (1) **Application:** Shimano and Schramm (1) keep prices high (1); battery costs represent 25% of the cost of e-bikes (1); "Almost all source from the same few supplies" (1) specialist equipment and design in manufacturing batteries (1); their power has stopped bike manufacturers 'squeeze out small competitors' Ext 3 line 12 (1) or small collection of battery firms implied (1)	4

Question Number	Mark scheme	Mark
10b	KAA 4 marks, of which 2 are reserved for the diagram. Explanation 2 marks: **Profits would increase** (1) where bicycle manufacturers adapt and start to sell e-bikes (1) Ext 3 2 'worth investing in' and line 9 'most traditional brands are coming out with e-bike lines'. Ext 1 lines 6-7 e-bikes growing by 22% a year. Figure 1 bicycle sales falling as e-bike sales rising. OR Identification/use of data to argue that ***profits would decrease*** (1) where e-bikes are a substitute or competing firm for traditional manufacturers (1) Extract 2 in France sales of traditional bicycles fell by 9% Diagram (2) showing need to minimise losses/make	8

	profit: • decrease or increase in AR/MR (**ensure this correlates with the argument used**) (1). The mark is awarded for the point MC=MR identified on new cost/revenue diagrams. • new profit/loss area shown (1) The mark is awarded for the correct area shown. Evaluation (4) Award as 2+2 or 3+1 or 4+0 marks. **The argument might be the reverse of the above, e.g. profits fall.** • It depends on how well the traditional bike manufacturers have embraced the new trend – not all firms affected in the same way. • It depends on the costs for existing bicycle firms to move into e-bikes (e.g. Cannondale in Extract 3) • Comment on the degree of changes in sales (might be seen as insignificant, or merely recession related) e.g. using Fig 1 • Other factors might have a greater impact on profits, e.g. the cost of batteries • Not enough information to say e.g. they face many costs etc. • Depends on their previous target market – e.g. – kids bikes won't have changed, which countries they mainly supplied • Other factors could be compounding the impact e.g. – rising incomes in China	

Question Number	Mark scheme	Mark
10c	KAA 6 Marks Award up to 3 policies (2+2+2) or 2 policies up to 3 marks each. **Policies must be linked to increasing sales.** Pricing policies might include: • Revenue maximisation • Output max/sales maximisation • Limit pricing or other reductions in price e.g.	12

	discount price • Price discrimination • Predatory pricing – a deliberate strategy of driving competitors out of the market by setting very low prices or selling below AVC. Once existing firms have been driven out and entry of new firms deterred it can raise prices and increase revenue (OECD definition). • Limit pricing – pricing by the incumbent firm(s) to deter entry or the expansion of fringe firms. The limit price is below the short run profit maximising price but above the competitive level (OECD definition). • Profit maximisation (increasing revenue if not previously doing so – note that this is not automatically true) Non-pricing policies might include: • Advertising • Loyalty schemes • Sales promotions e.g. free helmet, 'deals' for multiple purchases • Branding • Collusion behaviour linked with higher sales. • Mergers and other growth • Quality improvements, e.g. 'attractive designs' Ext 3 line 4 • After-sales service **There must be at least one pricing and non-pricing policy, and clear application, or CAP at 4/6 KAA.** Evaluation 6 marks Award up to 3 points (2+2+2) or 2 points up to 3 marks each. • Drawbacks of chosen policies, e.g. how effective they are, illegal (this is allowed for predatory pricing, but is not always true for limit pricing – depends on whether it is anti-competitive) • Market is growing so prices could be raised	

	• Depends on the reaction of other firms. Game theory could be used to support the evaluation (also can be awarded as part of KAA) • Standard weakness of policies, e.g. predatory pricing is illegal, might attract fines. • Large assets purchases are not usually repeated in the short term therefore coupons or vouchers may not work.	

Question Number	Mark scheme	Mark
10d	KAA 8 marks Award up to 4 points e.g. 4 + 4 marks, 3 + 3 + 2, 2 + 2 + 2 + 2 **Reasons why the industry is contestable (this might count as KAA or Evaluation)** • new firms are entering 'most traditional brands are coming out with e-bike lines as well' Ext. 3 line 9 • existing firms are bringing out electric versions of their traditional bicycles • all firms have to pay the same costs for motors/batteries, so small firms can exist/not squeezed out Ext. 3 line 12 • evidence profits are low (sign that firms are entering) • could see bigger firms such as car manufacturers diversifying into this market in the future if the trend continue • Use of data to evidence the new specialist firms that have started up/or that the existing bike firms have easily been able to diversify • Bike can be sold online e.g. internet technologies make most markets more contestable now – knowledge is better, fixed costs can be reduced • Technological change can make entry easier e.g. flexible machinery **Do not award answers based on competitiveness rather than contestability**	16

	KAA marks can be awarded for saying that the market is not contestable and then evaluating that it is. Evaluation 8 marks e.g. 4 + 4 marks, 3 + 3 + 2, 2 + 2 + 2 + 2 This may take the form that the market is **not contestable.** • Established firms are large and able to cross subsidise e.g. only two firms in Ext 3 line 9 do not already make traditional bikes • Established firms might have economies of scale • Retail outlets might be unwilling to stock e-bikes • Profitability is high Ext. 3 lines 2-3 (sign that firms cannot enter and erode profits) • Patents keep new firms out (allow legal barriers) • The design element acts as a barrier to entry e.g. Ext 2 line 4 'sophisticated electronic controls' • As the established firms grow there might be economies of scale or abuse of oligopoly power, making the industry less contestable • Start-up costs as a barrier to entry (especially due to the batteries) • Sunk costs e.g. marketing costs as a barrier to entry e.g. brand name 'Cannondale' • Potential for larger firms to use anti-competitive practices to keep newer firms out – collusion in the future • It depends if things change, e.g. vertical and horizontal mergers might lead to market concentration • Internet technology (selling online) evaluation e.g. knowledge still difficult to get, marketing still expensive • Technological change can make entry more difficult or exit more expensive e.g. sunk costs of machinery, or higher minimum efficient diagram • Depends on which 'market' e.g. EU 1.5m, China (largest market) or world (40m)	

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Write your name here

Surname	Other names

Pearson Edexcel GCE

Centre Number	Candidate Number

Economics

Advanced

Unit 3: Business Economics and Economic Efficiency

Tuesday 3 June 2014 – Morning
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 the **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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1/1/1/1/1

P 4 3 3 0 6 A 0 1 3 2

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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 Dairy Crest Group is a British food producer which uses a large amount of milk in its production processes to make dairy products. In March 2013, Dairy Crest Group bought Proper Welsh Milk, a firm which specialises in selling fresh milk. This takeover could lead to advantages of

(1)

A horizontal integration

B backward vertical integration

C forward vertical integration

D conglomerate integration

E external economies of scale

Answer ☐

Explanation

(3)

(Total for Question 1 = 4 marks)

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2 A cherry grower finds it impossible to influence the market price of her produce. Which of the following conditions would most clearly indicate that she operates in a perfectly competitive market?

(1)

A She produces at an output at which marginal cost is less than marginal revenue

B Marginal cost is equal to total cost at every level of output

C Marginal cost is equal to average cost at every level of output

D She produces at the same output in the short run as in the long run

E Average revenue equals marginal revenue at every level of output

Answer ☐

Explanation

(3)

(Total for Question 2 = 4 marks)

3 The management at a famous football club aim to promote the firm's success in matches as their primary objective. The firm's shareholders indicate at a meeting that they will accept low dividends on their shares on the condition that the club invests in new players. This indicates that the

(1)

A management is aiming for short-term gains in share prices

B management is profit satisficing

C management is profit maximising in the short run

D firm cannot make supernormal profits in the long run

E average variable cost of players is equal to the marginal revenue gained from their employment

Answer ☐

Explanation

(3)

(Total for Question 3 = 4 marks)

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4 The table gives weekly information about the possible short run output, costs and revenue of a firm making military equipment. Some cells have been left blank for your own workings.

Output per week	Total revenue (£millions)	Average revenue (£millions)	Total cost (£millions)	Average cost (£millions)	Marginal cost (£millions)
0	0	-	10	-	-
1	40	40		25	15
2	60				9
3	78				18
4	96				44
5	105				54

Which level of weekly output would mean that the firm is sales maximising?

(1)

A 1

B 2

C 3

D 4

E 5

Answer ☐

Explanation

(3)

(Total for Question 4 = 4 marks)

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5 Supermarkets selling freshly baked bread are operating in an oligopoly. They tend to keep prices stable for a popular, frequently compared product, an 800 gram white loaf. One reason for this might be

(1)

A supermarkets know that the pricing decisions of one supermarket will impact on those of other supermarkets

B supermarkets are independent and base their prices on costs alone

C there is heavy regulation in the industry to prevent tacit collusion

D supermarkets are unable to engage in non-price competition

E if prices were cut by one supermarket then the others would leave prices unchanged

Answer ☐

Explanation

(3)

(Total for Question 5 = 4 marks)

6 Barr and Britvic are two of the three largest soft drink firms in the UK. In February 2013, the proposed takeover by Barr of Britvic was referred to the Competition Commission for investigation. There were likely to have been concerns that the takeover would lead to

(1)

A economies of scale

B an increase in consumer surplus

C a decrease in contestability

D a reduction in external economies of scale

E a signal for more firms to enter the industry

Answer ☐

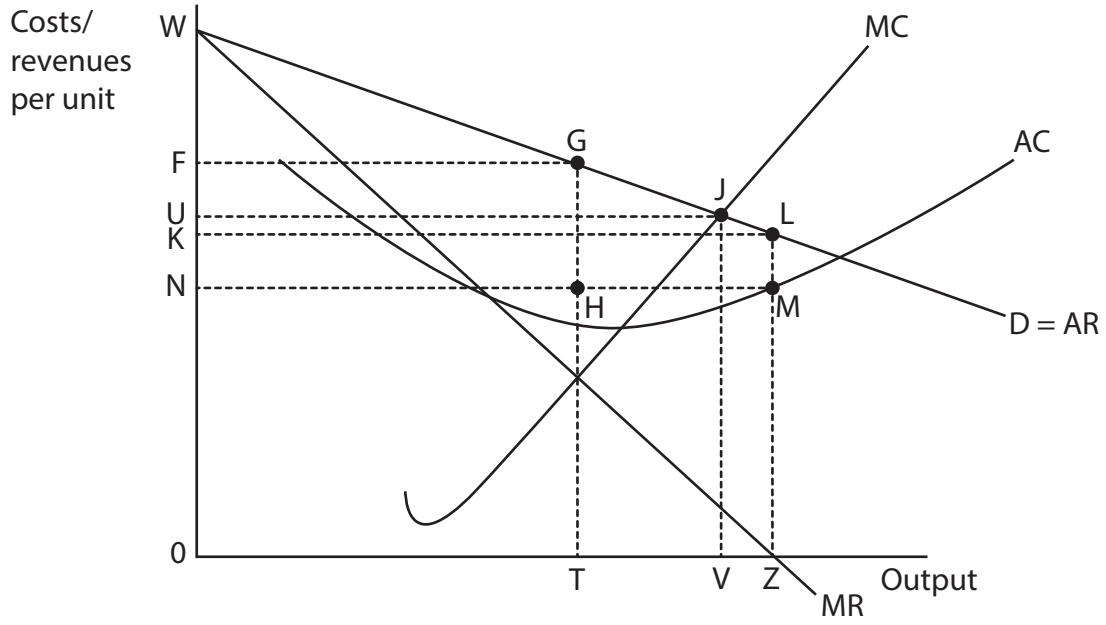
Explanation

(3)

(Total for Question 6 = 4 marks)

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7 The diagram shows the costs and revenues for a firm with monopoly power.



Which of the following statements is true?

(1)

A At output T the firm is revenue maximising

B At output V the firm is allocatively efficient

C At output Z the firm is productively efficient

D At profit maximising output the supernormal profits are KLMN

E At output Z the price is zero

Answer

Explanation

(3)

(Total for Question 7 = 4 marks)

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8 In March 2013, the government agreed to a £288 million Private Finance Initiative (PFI) hospital contract, to replace the Alder Hey Children's Hospital in Liverpool.

What is the most likely reason that a PFI hospital contract was used?

(1)

A This method would not lead to an immediate increase in government borrowing

B Private borrowers can borrow at a cheaper rate than the government can

C PFI contracts increase x-inefficiency

D It is easy to get out of a PFI contract once agreed

E The government has no experience of large-scale building projects

Answer ☐

Explanation

(3)

(Total for Question 8 = 4 marks)

TOTAL FOR SECTION A = 32 MARKS

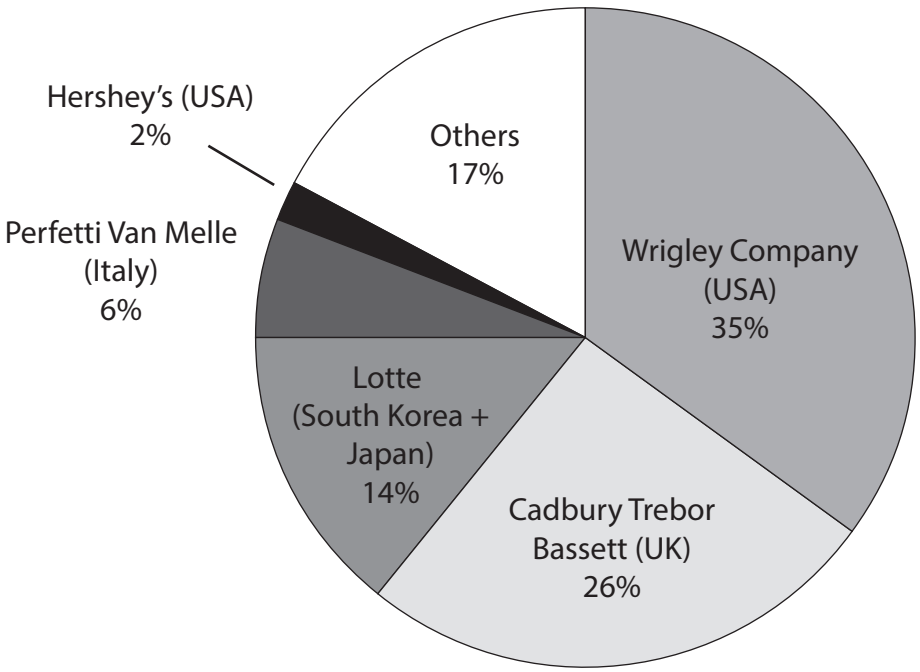
Section B: Answer either Question 9 or Question 10.

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

You should spend 55 minutes on this section.

9 The chewing gum market

Figure 1 Global market shares for chewing gum manufacturers



Extract 1 British designers create non-stick chewing gum that dissolves

Chewing gum is a problem worldwide and has even been banned in some countries. Normal chewing gum is made from synthetic latex, which is resistant to the weather and is strongly adhesive. A piece of gum costs around 3 pence to make, but it costs an estimated 10 pence to scrape it off the pavement using freezing machines, corrosive chemicals or even high-pressure steam hoses. The UK Government currently spends £150 million each year removing chewing gum from the streets using chemicals.

Recently a non-stick chewing gum that dissolves within just 24 hours has gone on sale in the US. The gum, developed in Britain, contains a special polymer which makes it far less sticky. 'Rev7' has the same taste and texture as normal chewing gum, but is water soluble and can be easily removed from clothes using soap and water. This ability to retain water also results in a longer lasting flavour which improves the experience for consumers. It is also more effective when used as a nicotine gum, designed to help smokers give up cigarettes, because it releases the nicotine in a more controlled way. Tests show that most of the gum can be removed by conventional street cleaning. Any gum washed into the drains will degrade into minerals, biodegradable products and inert materials.

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Designer Terry Cosgrove, a scientist at Bristol University, said: "The motivation to invent the product came from seeing chewing gum on the streets in this country and in America. It's everywhere. The materials developed can be used for lots of other uses such as anti-graffiti paint and bacterial protection. But because chewing gum is such an enormous problem at the moment we decided to target this as our main area. This is like a dream come true for me, seeing academic research result in a real commercial product." He reportedly offered the product design to Wrigley's, the current market leader in chewing gum, but no agreement was made.

Instead, Revolymer was set up in Wales in 2005 based on technology developed by Cosgrove at the University of Bristol. Revolymer was awarded patents relating to the Rev7 polymer technology, and the firm was aided by a grant of £1 million given in 2006 by the Welsh Assembly Government and the South West Regional Development Association to support the development of removable chewing gum. "There are also several other exciting ventures in the pipeline" said Cosgrove.

(Sources: adapted from www.telegraph.co.uk 5 October 2010 and www.revolymer.com/history March 2013)

Extract 2 Rev7 is withdrawn from US market

Revolymer is to stop directly selling its 'Rev7' confectionery gum in the US at the start of 2013. The US gum market as a whole is shrinking and there is a challenge to Revolymer's patent for nicotine gum products by other gum manufacturers. The firm said the shut-down of sales of Rev7 in the US is set to incur a one-off cost of £360 000 but the annual cost base of its US operation is £500 000 which it said would not be incurred in the future.

Its Rev7 gum has recently been launched in Ireland in partnership with the Topaz service station network as an initial test market for the rest of Europe.

Revolymer is seeking more commercial partnerships for its nicotine gum. The first product resulting from such a partnership was launched in Canada in 2012. In a statement, Revolymer said: "Management continues to believe that Revolymer's strategy of licensing its technology to commercialisation partners, rather than seeking to market its own products, will generate significant shareholder value."

(Source: adapted from www.insidermedia.com 20 December 2012)

(a) Using the data in Figure 1, explain the market structure in the global market for chewing gum.

(4)

(b) Discuss **two** benefits of awarding patents to new products developed by scientists.

(8)

*(c) Using a cost and revenue diagram, discuss **two** reasons why Revolymer is to stop selling its Rev7 confectionery gum in the US.

(12)

*(d) Discuss strategies that could be used by existing chewing gum manufacturers in response to the entry of a new competitor such as Revolymer.

(16)

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(4)

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(8)

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(12)

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*(d) Discuss strategies that could be used by existing chewing gum manufacturers in response to the entry of a new competitor such as Revolymer.

(16)

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(Total for Question 9 = 40 marks)

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If you answer Question 10 put a cross in this box ☒ .

10 Camera retailing



(Source: metro.co.uk)

Extract 1 Peter Jones reopens Jessops

Jessops, the photography retailer, made a surprise return to the high street in March 2013 when Peter Jones, one of Britain's best-known entrepreneurs on the BBC programme *Dragons' Den*, relaunched the chain 11 weeks after it collapsed. Jessops, which was founded in Leicester in 1935, reached shut-down point in January 2013. Jessops suffered both from consumers' shift to buying cameras on the internet and their increased reliance on cameras built into mobile phones. Mr Jones became Chief Executive of Jessops after buying the firm from its administrators PricewaterhouseCoopers. Mr Jones made his money from the telecoms industry and operates some stores for Vodafone and has online retail investments. He has invested £4 million in Jessops and will reopen around 40 shops, far fewer than the 187 shops the retailer had before.

"Britain's high street is fighting back," Mr Jones said as he reopened a refurbished flagship Oxford Street store, adding that shops could compete with online traders if prices are competitive. "Who would *not* want to buy a camera from expert and enthusiastic staff?" he said. Stores will feature areas to try out products before buying. Customers will be able to create photo albums and take photography courses through the Jessops Academy. Staff will also turn photos into calendars and posters while you wait. Mr Jones said companies such as Apple had proved that customers would spend time and money in a welcoming environment with quality staff in busy locations. "It is very Apple-ish. We have learnt from other retailers, I believe Jessops is an iconic British brand which can lead the retail resurgence on Britain's high streets, powered by new innovations and world-leading, expert staff" he said. "Image is everything and, even in the mobile and tablet era, there's no substitute for a quality camera when it comes to taking the perfect picture."

Mr Jones has reduced fixed costs from £8 million to £1.5 million by cutting administration costs, closing stores and further rationalisation. Jessops will have outlets in centres such as London, Birmingham, Manchester and St Albans, with six opening immediately. Jessops will hire as many as 500 staff and many are drawn from the 1 400 who lost their jobs when it collapsed. "A lot contacted me on Twitter and asked for a job and it's great to have them," said Mr Jones.

Prices will be matched to those of Jessops.com and Mr Jones said it would be "competitive" with other online retailers such as Amazon. "We will make our profit margin on the accessories," he said. He said "click and collect" would be a powerful driver of sales and Jessops promised greater integration with its online presence, including an option to collect internet orders at store. "I think Amazon will start to lose their market share because they do not have a collect at store. Nobody likes waiting in for a delivery."

Mr Jones forecasts sales of more than £80 million in his first year and expects to take some 15% of the digital single lens reflex camera market in the UK. Revenue before Jessops shut was £304.6 million, but the firm is said to have made a loss of £12 million in the fifteen months up to its closure.

More than 10 000 jobs have been lost in retail this year as chains such as HMV and Republic have fallen into administration. However, Mr Jones is not the only person to see potential in the high street despite flat retail sales. Sports Direct bought fashion chain Republic while Gordon Brothers Europe, the private equity firm, this week bought Blockbuster UK, the entertainment group, out of administration and will keep half its 528 stores open, claiming it can "bring new life" to them.

(Source: adapted from By Andrew Bounds FT.com 28 March 2013, www.ft.com/cms/ and www.thisisleicestershire.co.uk)

(a) Using examples from the data, explain what is meant by a 'shut-down point' (Extract 1 line 4).

(4)

(b) Using the data in Extract 1 and an appropriate diagram, discuss why Jessops was making a loss before it went into administration.

(8)

*(c) To what extent is price discrimination possible for firms selling products both on the internet and in high street shops?

(12)

*(d) Discuss strategies, apart from price discrimination, that high street retailers might use to increase profit in the face of greater competition from online retailers.

(16)

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(a) Using examples from the data, explain what is meant by a 'shut-down point' (Extract 1 line 4).

(4)

(b) Using the data in Extract 1 and an appropriate diagram, discuss why Jessops was making a loss before it went into administration.

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(16)

(Total for Question 10 = 40 marks)

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

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Mark Scheme (Results)

Summer 2014

Pearson Edexcel GCE
in Economics (6EC03) Paper 01

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General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

If the **key is incorrect** then the maximum explanation mark is 2, i.e. 0+2=2

Knockout marks (or rejection marks):
Candidates can be awarded up to 2 marks, 1 per point, for knocking out incorrect answers. This only counts if they have given a valid economic reason to go with their answer, where they have added value to the question.
E.g. for question 1, explaining it's not horizontal integration because that is where you merge/takeover a firm at the same stage in the production process/industry.
Candidates can also receive knockout marks without explicitly selecting a letter, if it's a clear reference is made to a **key**.

Question Number	Answer	Mark
1	**Correct option B (1 mark)** Vertical – at a different stage of the same industry or process of production or same final product (1) Backwards - it is previous/earlier/towards raw materials/away from consumer (1) Reasons or benefits of merger (1+1) e.g. rationalisation Application to the dairy industry (1) e.g. Proper Welsh is a primary industry. Only award the application marks if relevant to backward integration. Knock out examples It cannot be D because conglomerate integration involves merging with a firm in a different industry It cannot be C because forward integration is towards the consumer	**(4)**

Question Number	Answer	Mark
2	**Correct option E (1 mark)** Definition of a price taker e.g. has to sell at the market price (1) Horizontal **or** perfectly elastic demand curve (1) – could also be awarded from their diagram (not both) Explanation of perfect competition: one characteristic, e.g. no barriers to entry or exit, many firms, homogenous product (1); Diagram showing horizontal AR=MR (1 – if not previously awarded); link to market equilibrium in a separate market or industry diagram (1) Application to cherries – they seem very similar (1) Examples of knock out: It is not A as we assume they are a profit maximiser operating where MC=MR It is not C as MC=AC is the productive efficiency point and this will only happen in the LR	**(4)**

Question number	Answer	Mark
3	**Correct option B (1mark)** Definition profit satisficing (making enough profit to keep shareholders happy/sufficient/just enough/target/fixed amount) (1) Reasoning, e.g. they may have other objectives (1) It may mean long run profit maximisation (1) Reason why this occurs e.g. divorce of ownership from control, principal agent problem (1) Diagram to illustrate minimum profit as range of output levels (1) Application – people may be shareholders for other reasons than profit e.g. winning matches, attendance at matches, brand development (1 + 1) Example of knock out: It's not C as profit maximising is where MC=MR It's not A as low dividends are likely to make share prices fall (or other logical reasons why share prices change)	**(4)**

<table>
<tr><th>Question Number</th><th>Answer</th><th>Mark</th></tr>
<tr><td>4</td><td>Correct Option D (1 mark)

<table>
<tr><th>Output per week</th><th>Total revenue (£millions)</th><th>Average revenue (£millions)</th><th>Total cost (£millions)</th><th>Average cost (£millions)</th><th>Marginal cost (£millions)</th></tr>
<tr><td>0</td><td>0</td><td>-</td><td>10</td><td>-</td><td>-</td></tr>
<tr><td>1</td><td>40</td><td>40</td><td>25</td><td>25</td><td>15</td></tr>
<tr><td>2</td><td>60</td><td>30</td><td>34</td><td>17</td><td>9</td></tr>
<tr><td>3</td><td>78</td><td>26</td><td>52</td><td>17.3</td><td>18</td></tr>
<tr><td>4</td><td>96</td><td>24</td><td>96</td><td>24</td><td>44</td></tr>
<tr><td>5</td><td>105</td><td>21</td><td>150</td><td>30</td><td>54</td></tr>
</table>

Definition sales maximisation AC=AR or TC=TR; <u>or</u> selling as much as you can without making a loss (1)
Identification that at sales maximisation there are normal profits or no supernormal profits/loss (1)
Filling in columns with correct AR, TC, AC, TR-TC or total profit (1 mark for each correct column up to 4 units is sufficient): (1 + 1+ 1)

Diagram showing AC=AR (1)
Output is at £96 million TR/TC <u>or</u> £24 million AR/AC (1)</td><td>(4)</td></tr>
</table>

Question Number	Answer	Mark
5	**Correct Option A (1 mark)** Definition of oligopoly e.g. a few firms dominate the market (1) Supermarkets are **interdependent** (1) Other firms will follow if prices are cut (1) Firms will not follow if prices rise or other asymmetric reaction comments (1) Diagram showing a kinked demand curve with annotation or explanation of inelastic section for downward moving prices or elastic section for upward moving prices (1 +1) – Note kinked demand curve is not required Pay off matrix correctly showing that the firm will not change prices (1 + 1) Application – bread is regularly purchased and therefore easy to spot price changes (1) or often a loss leader (1) Example of a knock out: It's not C as if it is tacit collusion it has not been controlled by the regulator/competition authorities It's not D because supermarkets use non price competition such as loyalty cards and customer service schemes	**(4)**

Question Number	Answer	Mark
6	**Correction Option C (1Mark)** Definition of contestability e.g. no/low barriers to entry or exit or no sunk costs (1). May be implicit. Reasons why barriers to entry might rise (or reduced exit options) (1 + 1 + 1) e.g. economies of scale, power to advertise, giving firms monopoly power to limit competition or raise prices. The reasons must be linked to contestability not competitiveness. Role of the regulator, e.g. protect consumer interest/welfare (1) Identification that it is horizontal integration (1) Example of knock out: It's not D because the market size could get bigger or smaller It's not B because consumer surplus is likely to fall if prices rise	**(4)**

Question Number	Answer	Mark
7	**Correction Option B** Definition of allocative efficiency, e.g. the price is equal to the marginal cost (AR=MC or P=MC) (1) Explanation of monopoly – single firm dominates or 25%+ market share (1) Explanation that the price has been set at a point that maximises (consumer/producer) welfare (1); Monopoly may do this as marginal cost pricing has been imposed by the government (1) Annotation of diagram showing consumer/producer welfare(1) Example of knock outs (can also come from annotating the diagram) It's not C because M is not at the lowest point of AC It's not D because this is revenue maximisation (or the area KLMN represents SNP for a revenue maximising firm) It's not D as shown by a correctly annotated profit maximising area on their diagram (connecting AR and AC at output T – this will involve a new horizontal line meeting the AC curve)	**(4)**

Question Number	Answer	Mark
8	**Correction Option A** Meaning of PFI: major infrastructure/buildings/project/large scale contracts are issued by governments to private firms (1) It is then **leased** or **rented** to the public sector (1) over 25-30 years (1) Benefits to the government e.g. – it does not have to borrow this year (off the balance sheet), can spend on current demands, useful in times of fiscal austerity, makes efficient use of specialists, reduces risk for government, leads to more immediate public services, creates competition at point of tendering, "the government's credit card"(1 + 1+ 1) Costs to the government e.g. - leading to higher overall costs in the long run (1) – these may be incorporated within knock out marks Application to hospitals, e.g. more specialist hospitals or more up to date technology, better quality service(1) Examples of knock outs: It's not C as PFI will decrease x-inefficiency as there is competition during the tendering process It's not D as to exit the contract there will be penalty costs It's not B as the government achieve a lower rate due to carrying less risk	**(4)**

Question 9 The chewing gum market

Question Number	Answer	Mark
9a	Theory (2): Oligopoly (1) where a few firms dominate the market, or similar explanation (1) **OR** Monopoly (1) where one firm dominates the market/one firm with more than 25% market share (legal definition) Application (2): 2 firm concentration ratio of 61% (2) 3 firm CR of 75% (2) 4 firm CR 81% (2) 5 firm CR 83% (2) Other application (1 + 1) e.g. – Wrigley has 35% market share or Cadbury's has 26%(1) which is greater than the 25% legal minimum (1) other evidence of oligopoly behaviour e.g. strong brand names, collusive behaviour, barriers to entry, high sunk cost, high cost of research (1) Reserve one application mark for use of Figure 1	**(4)**
9b	KAA 4 (may or may not include a definition mark) Definition (1): A patent is a legal protection of a design idea or process (1) or, a kind of copyright (1) Benefits of patents (2+2 or 3 +1) might include: For firms: • Helps to develop a competitive advantage via a unique feature • Provides a source of monopoly power • Barriers to entry • Give firms short/medium term abnormal profits • Enables firms to develop into new market Benefits to economy as a whole: • Encourage Research and Development • Existing firms can take risks with new idea • new ideas from universities will have practical uses • Innovation is encouraged e.g. dynamic efficiency • Macro benefits, e.g. multiplier effects • Investment in research in turn in the long run may benefit society as a whole e.g. cancer • External benefits e.g. less passive smoking Benefits to other stakeholders: • Government benefits e.g. reduced costs of cleaning pavements • Consumer benefits e.g. more choice & improved quality CAP 3 KAA if only one benefit of patents	**(8)**

	Evaluation (2+2 or 3+1 or 4+0): • Patents allow supernormal profits to be made (question of fairness), • Patents stifle competition or innovation by others; • alternatives to patents might be considered, e.g. subsidies to university research • crowding out of other innovation • leading to higher prices or reduced choice • disadvantages of monopoly • may cause x-inefficiency • Other problems of patents e.g. – cost to achieve, only held for a limited time, not fair to firms who cannot gain them, enforcement issues	

Question Number	Answer	Mark
9b	KAA 4 (may or may not include a definition mark) Definition (1): A patent is a legal protection of a design idea or process (1) or, a kind of copyright (1) Benefits of patents (2+2 or 3 +1) might include: For firms: • Helps to develop a competitive advantage via a unique feature • Provides a source of monopoly power • Barriers to entry • Give firms short/medium term abnormal profits • Enables firms to develop into new market Benefits to economy as a whole: • Encourage Research and Development • Existing firms can take risks with new idea • New ideas from universities will have practical uses • Innovation is encouraged e.g. dynamic efficiency • Macro benefits, e.g. multiplier effects • Investment in research in turn in the long run may benefit society as a whole e.g. cancer • External benefits e.g. less passive smoking Benefits to other stakeholders: • Government benefits e.g. reduced costs of cleaning pavements • Consumer benefits e.g. more choice & improved quality CAP 3 KAA if only one benefit of patents Evaluation (2+2 or 3+1 or 4+0): • Patents allow supernormal profits to be made (question of fairness), • Patents stifle competition or innovation by others; • Alternatives to patents might be considered, e.g. subsidies to university research • Crowding out of other innovation • Leading to higher prices or reduced choice • Disadvantages of monopoly • May cause x-inefficiency • Other problems of patents e.g. – cost to achieve, only held for a limited time, not fair to firms who cannot gain them, enforcement issues	**(8)**

Question Number	Answer	Mark
9c	Reserve 2 marks for diagram: Shift showing increasing costs (e.g. legal costs) **or** falling/insufficient demand (1) and loss area/smaller profit connected with MC=MR (1) Reasons might include (2+2 or 3+1): • Nicotine gum manufacturers are acting in a threatening way (game theory might be used to develop this argument) • Too many competitors for the firm to make supernormal profits • Huge costs of operating in US relative to other countries, and other set up costs, e.g. £500 000 annual cost base in US • It has reached shut down point or not making enough profit • It does not expect demand to grow sufficiently in the future • Demand was not as high as expected. 'Gum market is shrinking' in Extract 2 • Challenge to patent • Nicotine firms might be cross-subsidising in the US, or similar comments on the confectionery market being directly affected by the nicotine market problems • other things are not equal • Lack of commercial opportunities in US • Better opportunities elsewhere Evaluation 6 marks: (3x2 marks or 2x3 marks). Points might include: • Not enough information to say as insufficient data provided • Other markets might be more profitable, e.g. Ireland/EU • New products find the US more difficult than other countries to break into – higher marketing barriers • Use of game theory might show how new entrants are deterred • Cost and revenue factors work together to magnify the impact, or other weighing together of the factors • Depends on the degree to which they can cross subsidise losses in the US, the amount of retained profits within Revolymer • In the LR the situation may improve e.g. – working with commercialisation partners as in Canada (extract 2 line 10) • Comment on the £360 000 cost of closing down. It might have been better to stay in the US. • Prioritisation of the reasons with justification	

Question Number	Answer	Mark
9d	Award up to 4 strategies (4x2 marks), or (3+3+2) or (2x4 marks) Strategies might include: • Pricing policies (may count as more than one strategy): predatory, limit pricing, sales max • Non-pricing strategies, e.g. heavy marketing (may count as more than one strategy) • Cross subsidisation • Existing firms might cut own costs • Collusion • New ideas might be developed to create barriers to entry • Other barriers to entry discussion • Merger & acquisition activity is likely e.g. new entrants being bought up • Challenge legal patents that have been awarded Award appropriate use of game theory to develop a point KAA CAP 6/8 if no reference to chewing gum manufacturers Evaluation 8 marks (4x2 marks), or (3+3+2 marks) or (2x4 marks): • there might not be a reaction – very small firm, already failing in US, niche market • Other magnitude points, e.g. size of profits of existing firms might mean that new entrants cannot compete in marketing • US market is unlike Europe market. Might be more room for growth in Europe or elsewhere. • Depends on whether we are in recession or growth (is the product a luxury?) • Discussion involving game theory can earn evaluation marks, e.g. the behaviour depends on the size of the payoffs • Size of fines, and magnitude of other legal powers • Critical judgement of strategies set out under KAA • Prioritisation with justification	**16**

Question 10 Camera retailing

Question Number	Answer	Mark
10a	**Theory (2)** – Price (AR) is less than or equal to AVC **OR** Price (AR) is less than or equal to AC (long run) – (1) **OR** TR is less than or equal to TVC (1) Explanation of the above. For example the firm is: • making less than normal profit (1) • making a loss which exceeds the VC (1) **or** making a loss (1) • not making a contribution (1) • able to make a smaller loss if it discontinued production (1) • not covering its day to day costs/running costs/working capital (1) i.e. an implicit understanding of **variable** costs, which might be achieved using application A diagram showing price below AVC (1) with loss area shown (1) or other explanation using a valid diagram. Note that the diagram marks are part of the theory. **Application (2)**: Jessops was making a loss of £12 million (1) despite revenues of £304.6 million (1) Since £12million is greater than the fixed costs (£8 million) so the firm is losing £4 million on variable costs alone (1 + 1) Example of variable costs: Jessops is not even covering the costs of its cameras (1) Example of fixed costs: Jessops is not covering rent (1)	**(4)**

Question Number	Answer	Mark
10b	KAA 4 marks. Reserve 2 marks for diagram. 2 marks For answers which discuss two difference revenue or costs changes allow up to 4 marks. The answers must be developed in different ways. Diagram 2 marks.: 1 mark for **shift** (AR and MR shift, or AC shift (Costs had risen (n.b. fixed costs must be related to data, and no shift in MC)), 1 mark for **loss area** correctly linked to MC=MR, and cost and revenue curves. Reasons for loss (2 marks: 1+1 or 2+0) might include: • Rising costs, with application • Falling demand for cameras as a whole, with application • Increased competition for cameras meaning smaller market power for each firm • Consumers buying on the Internet • Cameras in mobile phones Evaluation 4 marks: (2+2 or 3+1 or 4+0) • both demand and cost shifts can be shown to magnify the impact • Jones might be over-optimistic about end of recession – losses may continue • Jones is going to cut costs and increase demand – profits will occur in future, but is temporarily suffering losses • Depends on ability of Jones to reduce future losses • Difficult to know – need more information about causes of loss, e.g. how other firms have got on, e.g. London Camera Exchange • Camera phones are not a good substitute for all buyers • A £12million loss is very small in comparison to a £304.6 million revenue • It is a combined effect, compounded by another factor	**(8)**

Question Number	Answer	Mark
10c	KAA 6 marks Allow up to (2x 3 marks) or (3x2 marks) or Diagram (2) plus (2+2) or (3+1) Answer may relate to price discrimination within Jessops or between firms within any retailing market. Allow 1 mark for clear explanation of price discrimination (selling the same product at different prices) (1) Diagram marks (up to 2 marks) - Inelastic AR or D linked to high price and/or elastic linked to low price (1) (can be shown through gradient of AR or D) - Profit maximisation output and prices extrapolated from whole firm diagram (1) Reasons why price discrimination is possible: Discussion of fulfilment of conditions for price discrimination: • Different price elasticity of demand, e.g. higher PED online as more competition • Monopoly power. Consideration of the branding within the market, and the ability to retain customers even when prices are raised. The appeal of Jones himself might be considered as a marketing tool. • Separation of the market, e.g. people want to try the product and receive advice in a shop, and online there is a time delay before the goods are received • Low costs of preventing arbitrage, or similar. For people shopping in store they may or may not be prepared to go home and buy the product online. Also can consider the risks or other costs of buying on the internet. Award application: as part of these conditions (up to a maximum of 3 marks for each condition overall), e.g. - Jessops sells accessories at higher prices in the high street stores but the cameras are very similar prices. - Online prices are lower so people are transferring to the online market. - High street stores are closing for this reason - Jones's comments on trying the cameras in the shop, the Apple-ish model, etc. - Jones does not intend to price discriminate on the major lines, but instead have very similar prices to online. He plans to make the money on accessories	**(12)**

	Evaluation: 6 (2x3 marks or 3x2 marks) • Discussion of whether price discrimination is in fact possible as a strategy, e.g. in the long term arbitrage will become easy • It's product discrimination not price discrimination because costs in each market are different • It's product discrimination not price discrimination because 'Try before you buy' and other advice in the shop means that the product in the shop is not the same as the one online (or similar application points) • Changes in the economic cycle will affect PED, and other determinants of PED • Jones is willing to stake £4million that discrimination is possible • Depends on the season, e.g. Christmas, and the PED • Depends on other factors, such as ability to park, availability of other retail outlets nearby, as to the willingness of face-to-face shoppers to spend. • Depends on actions of competitors e.g. click and collect • Other criticisms of price discrimination, e.g. it can be illegal in some cases, and might be investigated by the competition authorities	

Question Number	Answer	Mark
10d	Award up to 4 strategies (4x2 marks), or (3+3+2 marks) or (2x4 marks) **Any comments regarding price discrimination are NOT permitted** Strategies MUST be linked to profit. These might include: • Pricing policies (may count as more than one strategy): predatory, limit pricing, cost-plus, BOGOF *if linked to profit* • Non-pricing strategies (may count as more than one strategy) e.g. heavy marketing, loyalty cards, good sales information, after sales service, friendly, photo albums, posters whilst you wait • Existing firms might cut own costs • New ideas might be developed to create barriers to entry • Other barriers to entry discussion • M&A activity is likely for new entrants being bought up • BOGOF (allowed if not used as a pricing strategy) Award appropriate use of game theory to develop a point KAA CAP 6/8 if no reference to high street retailers Evaluation 8 marks (4x2 marks), or (3+3+2 marks) or (2x4 marks): • it might not be possible to make profits – odds are stacked against high street stores as their costs are higher • Magnitude issues, e.g. size of cuts in number of stores by Jones is a significant shift in fixed costs • Depends on whether we are in recession or growth (camera is luxury, large part of income, YED issues etc) • Discussion involving game theory can earn evaluation marks, e.g. the behaviour depends on the size of the payoffs • Depends on the actions of other firms (game theory might be used) • Some practices are illegal e.g. predatory pricing • Cost of policies, e.g. advertising • The high street retailer can adapt to also become an online retailer • Critical judgement of strategies set out under KAA • Prioritisation with justification	**(16)**

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Write your name here

Surname	Other names

Pearson Edexcel GCE

Centre Number	Candidate Number

Economics

Advanced

Unit 3: Business Economics and Economic Efficiency

Tuesday 3 June 2014 – Morning
Time: 1 hour 30 minutes

Paper Reference
6EC03/01R

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 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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P 4 3 5 3 9 A 0 1 3 6

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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 Arnold Clark Automobiles is a car retail firm that sells many Ford cars in its showrooms. If the Ford Motor Company, a motor car manufacturer, buys a majority shareholding in Arnold Clark Automobiles, Ford could gain advantages of

(1)

A horizontal integration

B backward vertical integration

C forward vertical integration

D conglomerate integration

E external economies of scale

Answer ☐

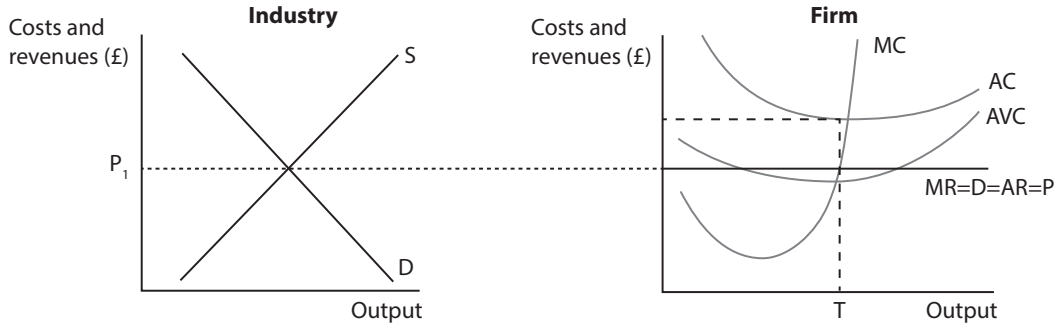
Explanation

(3)

(Total for Question 1 = 4 marks)

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2 The diagrams represent the revenue and cost conditions for an industry and one individual profit maximising firm within the industry. You may annotate the diagrams in your answer.



Output T indicates that the firm is making

(1)

A normal profit and price and output will remain unchanged

B supernormal profit and price will fall as new firms enter the industry

C a loss and will shut down in the short run

D a loss and will continue producing in the short run

E supernormal profit and price will rise in the long run

Answer ☐

Explanation

(3)

(Total for Question 2 = 4 marks)

3 The table gives information about the short run output, costs and revenue of a profit maximising firm making playground equipment. Two columns have been left blank for your own workings.

Output per week	**Total revenue (£'000s)**		**Total cost (£'000s)**	
0	0		10	
1	20		14	
2	38		19	
3	54		28	
4	68		42	
5	80		63	
6	90		93	

Which **one** of the following would be consistent with this information?

(1)

A At output level 1 average fixed cost is lower than at output level 4

B At output level 2 a profit of £9 000 is made

C At output level 4 marginal cost equals marginal revenue

D At output level 5 marginal revenue is greater than marginal cost

E At output level 6 average total cost is lower than output level 4

Answer ☐

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Explanation

(3)

(Total for Question 3 = 4 marks)

4 A firm producing car tyres sells the largest amount possible consistent with earning normal profits. The short run objective of the firm is most likely to be

(1)

A revenue maximisation

B profit satisficing

C sales maximisation

D predatory pricing

E maximisation of shareholder dividends

Answer ☐

Explanation

(3)

(Total for Question 4 = 4 marks)

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5 Two petrol stations located on the same main road are struggling to stay in business in the face of aggressive competition from local supermarkets. They tacitly agree not to compete on price but offer loyalty schemes. Which **one** of the following conditions would make their survival more likely?

(1)

A Increasing willingness of consumers to use loyalty schemes rather than respond to price alone

B Tighter government regulation to prevent collusion

C Increasing monopsony power over petrol suppliers by local supermarkets

D Demand for petrol becoming more price elastic

E Reductions in barriers to entry into the petrol retailing market

Answer ☐

Explanation

(3)

(Total for Question 5 = 4 marks)

6 Shoe repair firms are operating under conditions of monopolistic competition. Which **one** of the following is most likely to exist in the long run?

(1)

A Allocative efficiency in the market

B Collusion between firms

C Productive efficiency in all firms

D High levels of regulation

E Normal profits

Answer ☐

Explanation

(3)

(Total for Question 6 = 4 marks)

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7 Market shares of US office stationery suppliers, 2012

Staples	39.9 %
Office Depot	19.2 %
OfficeMax	15.7%
Others	21.9%

(Source: Echo Research data)

In February 2013, Office Depot agreed to a merger with OfficeMax to create a US stationery retailer with combined sales of $18 billion, subject to approval by the Federal Trade Commission, the US competition authority. The most likely reason why such a merger might be blocked is to

(1)

A enable a firm to gain technical economies of scale

B increase barriers to entry

C increase the concentration ratio

D encourage investment in the industry

E prevent exploitation of consumers

Answer ☐

Explanation

(3)

(Total for Question 7 = 4 marks)

8 The following matrix shows the possible profit outcomes (£ millions) of two firms selling breakfast cereals.

		Harker Ltd	
		High price	**Low price**
Bensel Ltd	**High price**	£100 / £100	£20 / £160
	Low price	£160 / £20	£60 / £60

Initially, Harker Ltd. and Bensel Ltd. colluded to set a high price. However, Bensel has just decided to break this agreement and under-cut the price. Which **one** of the following is the most likely consequence of this? Harker will

(1)

A experience an increase in profits

B reduce its price and both firms will make lower profits

C charge low prices and Bensel will charge high prices

D experience an increase in producer surplus

E experience diminishing marginal returns

Answer ☐

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Explanation

(3)

(Total for Question 8 = 4 marks)

TOTAL FOR SECTION A = 32 MARKS

Section B: Answer either Question 9 or Question 10.

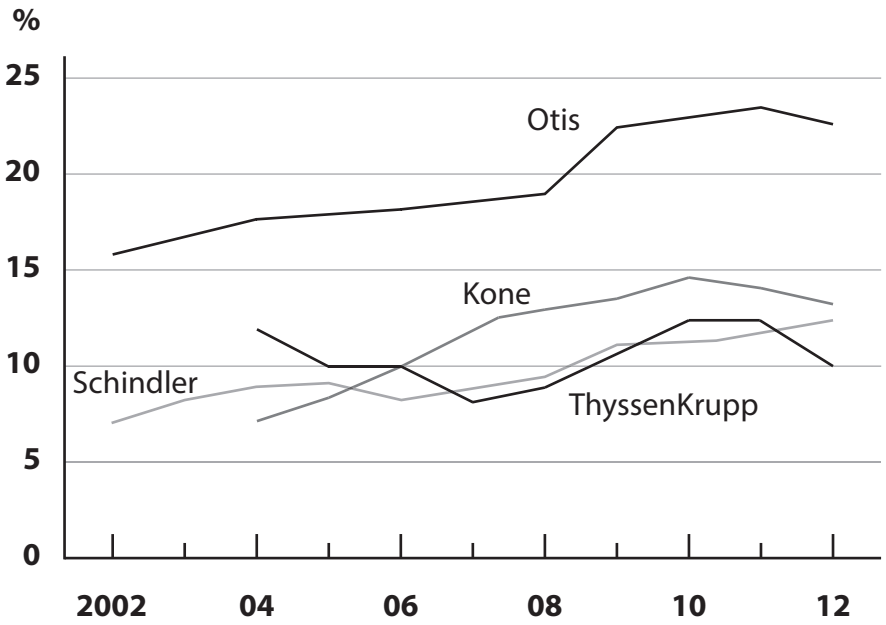
If you answer Question 9 put a cross in this box ☒ .

Question 10 starts on page 24.

You should spend 55 minutes on this section.

9 The elevator (lift) market

Figure 1 Profit margins for elevator supply companies



(Source: Company reports)

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Figure 2 Percentage shares of global elevator supply market

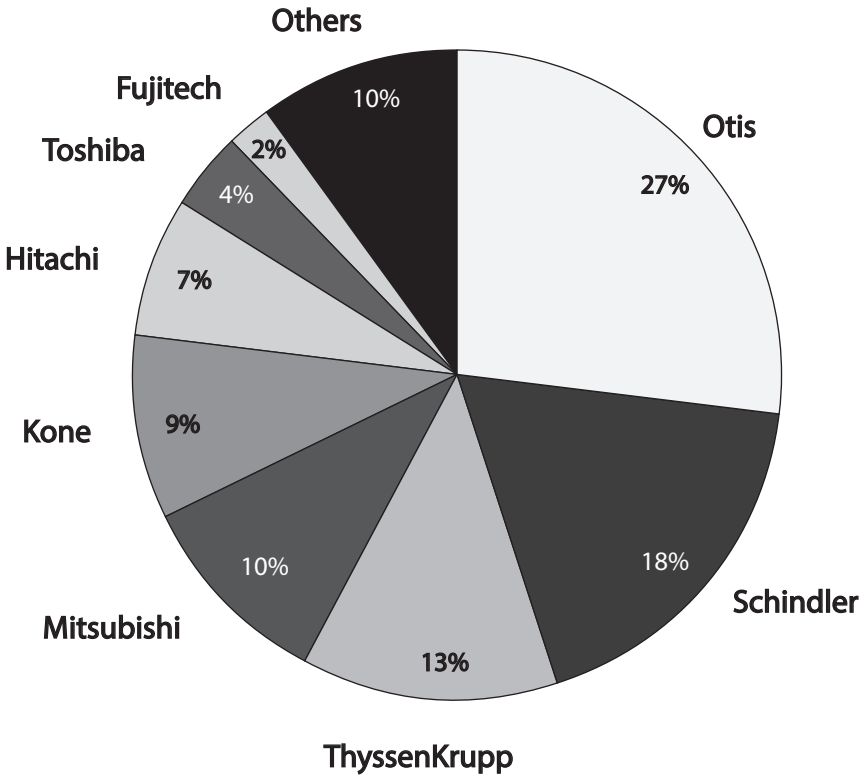
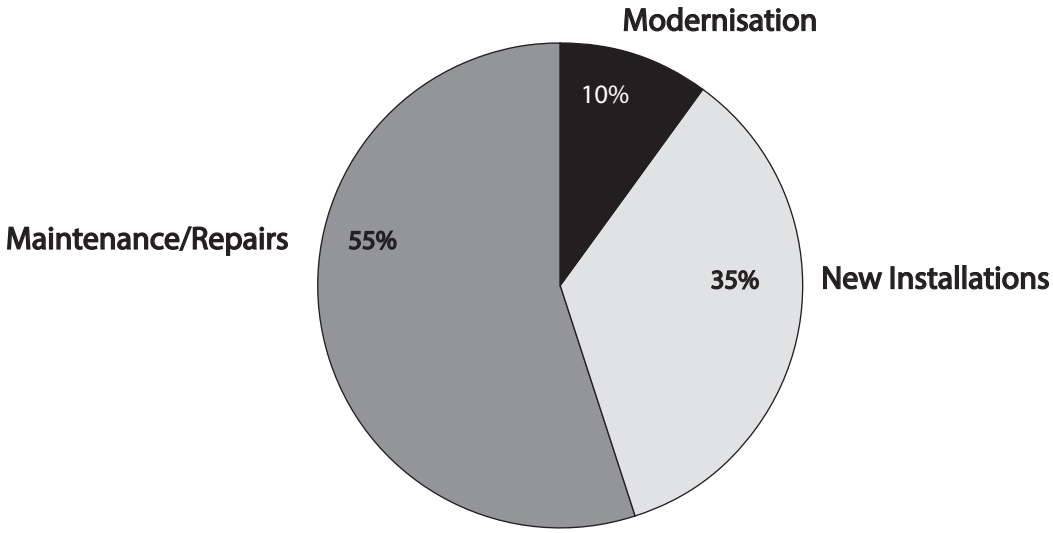


Figure 3 Product structure of $28 billion global elevator supply market, percentages



(Source of Figures 2 and 3: ThyssenKrupp company reports)

Extract 1 ThyssenKrupp moves away from steel

ThyssenKrupp, a German manufacturer, needs to get out of steel production, at least partially, and it needs to do so fast. Last year, this business division generated €1.8 billion ($2.3 billion) in losses, which accounts for a large portion of the roughly €6 billion in debts the company has piled up.

Chief Executive Heinrich Hiesinger wants to transform ThyssenKrupp into a technology company, with the majority of its activity in other products, such as elevators. His predecessor built two new steel mills, one in Brazil and one in the US, in an attempt to put ThyssenKrupp into the same league as the world's largest steel producers. It has turned out to be the worst investment in the company's recent history, and the steel mills are now being sold at a loss.

ThyssenKrupp doesn't have sufficient funds to buy up new companies and expand its business into areas other than steel. Although a multinational company worth billions, it has been run as if it were a mid-sized family company. Important decisions used to be made by just three men conferring among themselves. As long as the shareholders received dividends, all seemed well. But small problems that were not dealt with have developed into a crisis that now threatens the company's very existence.

After taking up his post, Hiesinger realised that the company lacked some of the basic things it would need to operate efficiently as a technology company. There was no standardised accounting system or integrated control. Further, the company's main area of business, steel production, was run in such a way that the blast furnaces were kept operating day and night, regardless of whether they were making or losing money by doing so.

The low profit margin on elevator installations acts as a natural barrier to entry to other firms, and the area for revenue growth is in elevator maintenance. ThyssenKrupp's elevator installation division of the business earns 10% profit margins, although annual management contracts for elevators at €1500 to €4000 per elevator are far more profitable, at 30%. Elevators are becoming more standardised globally, making it easier to find economies of scale. The established network of repair technicians within central Europe makes the prospects attractive in the elevator sector, a market which other firms cannot enter because service contracts are agreed at the point of elevator installation.

(Source: © SPIEGEL International 2012.)

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Extract 2 The European Competition Commission claim that an elevator operating cartel has increased prices

In 2007, after several years of difficult investigation, the European Commission imposed heavy fines on members of a cartel in the elevator and escalators market. The Commission fined Kone, Otis, Schindler and ThyssenKrupp a total of €992 million for operating cartels for the installation and maintenance of elevators and escalators in Belgium, Germany, Luxembourg and the Netherlands. The cartel members and their subsidiaries were found to have rigged bids for procurement contracts and other contracts for the sale, installation, maintenance and upgrading of elevators and escalators with the aim of freezing market shares and fixing prices. They were also found to have shared commercially sensitive and confidential information on bidding patterns and prices, although this was difficult to prove. In November 2012 the European Commission was allowed to claim compensation for losses to EU institutions resulting from this cartel.

(Source: www.mondaq.com)

(a) Using the data in Figure 2, explain the market structure in the global market for elevators.

(4)

(b) Assess the significance of barriers to entry into the global elevator market.

(8)

*(c) Using the data in Extract 1 and an appropriate diagram, examine the reasons why ThyssenKrupp 'needs to get out of steel production'. (Extract 1, line 1)

(12)

*(d) Evaluate the issues the competition authorities might face when attempting to regulate the elevator industry.

(16)

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(12)

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(16)

(Total for Question 9 = 40 marks)

If you answer Question 10 put a cross in this box ☒ .

10 Supermarkets

Extract 1 Tesco to open Harris + Hoole coffee shop in flagship store



Tesco is opening its first Harris + Hoole coffee shop inside one of its most important London stores. The supermarket giant has secured planning permission to install a branch of the coffee shop chain inside its 'lifestyle store' near London Bridge station. Harris + Hoole (H+H) promotes itself as an independent family business but is, in fact, 49% owned by Tesco.

H+H is also preparing to open another of its coffee shops next door to Tesco Express in Imperial Wharf, west London, in a property owned by Tesco. A Tesco spokesman said "We think our customers will love Harris + Hoole's freshly roasted coffee and great quality cakes and pastries and look forward to its opening later this year."

H+H, named after coffee-loving characters in the Diary of Samuel Pepys, does not mention Tesco's ownership stake in stores or on its menus, and promotes itself as a small, family run business.

(Source for text/image: adapted from Rupert Neate *The Guardian*, 5 February 2013
source: adapted from www.guardian.co.uk, 5 February)

Extract 2 Philip Clarke, Chief Executive at Tesco, writing on Tesco website

You might have seen some recent press coverage about our investment in the start-up coffee shop business, Harris + Hoole. We've always been upfront about our investment in H+H. We like backing great brands, helping them to grow and to realise their potential. We've done it with suppliers for years. Great ideas can find it hard to get backing these days, so we're pleased to be in a position to help entrepreneurs achieve their vision.

Some people have asked why it's not branded Tesco. The H+H brand is part of its value – its distinctiveness and appeal. So what's in it for Tesco? I've talked a lot about loving the stores we have, making them an appealing destination for customers to come to.

(Source: adapted from www.tescoplc.com)

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Extract 3 Supermarket firms look to co-trading to reinvigorate their future

Britons are falling out of love with hypermarkets as the higher price of petrol puts them off driving to big out of town stores. With many budgeting carefully, they are also keen to avoid the temptations of a hypermarket, with its mix of food, fashion and furniture. At the same time, more and more non-food items, such as electricals, are moving online. UK online grocery sales by value are forecast to rise almost 100% to £11.1 billion over the next five years. Sales by discount stores such as Lidl are forecast to increase 65% to £12.4 billion, while convenience store sales are expected to rise 29% to £43.6 billion. However, sales at supermarkets and hypermarkets, defined as stores of more than 25 000 square feet (2 323 square metres), are forecast to rise by just 6.4% to £76.9 billion, and some, such as Tesco, announced a fall in profits in 2012, for the first time in 20 years.

One idea being proposed is to bring in brands from outside the supermarket sector to use surplus space and make the giant sheds more enticing to shoppers. According to Andy Clarke, Chief Executive of Asda, this could mean "mini high streets indoors". Tesco recently bought Giraffe, the family-friendly restaurant chain, for £50 million. Neil Saunders, Managing Director of Conlumino, a retail research group, says: "It's very much shop-in-shop. For me it's a recognition that there is a lot of surplus space in supermarkets that is not terribly productive."

The movement of non-food products from supermarket shelves to internet browsers presents grocers with surplus capacity in their biggest stores. Mr Clarke says Asda could go further and is considering letting space to non-competing local suppliers, or associated retailers, such as shoe repairers, hairdressers, travel agents and pharmacies. Although Sainsbury's does not have many hypermarkets, it already has more than 270 pharmacies in its stores, as well as about 10 private dental practices and 40 doctors' surgeries in stores or on land it owns. And it is not just supermarkets that are exploring using their stores more creatively. Kingfisher, the DIY chain, has determined that its UK business, B&Q, could take the same amount of money with about 20% less space. Asda has already agreed to lease more than half of a large B&Q store in Kent.

(Source: adapted from Andrea Felsted www.ft.com, 1 April 2013)

(a) Explain the likely impact on average costs of surplus capacity in hypermarkets.

(4)

(b) Assess the benefits that the H+H business might gain through its Tesco connection.

(8)

*(c) Using the data in Extract 3 and an appropriate diagram, assess reasons why Tesco's profits fell in 2012.

(12)

*(d) Evaluate pricing **and** non-pricing strategies that supermarket firms might use to increase revenue.

(16)

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(12)

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*(d) Evaluate pricing **and** non-pricing strategies that supermarket firms might use to increase revenue.

(16)

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(Total for Question 10 = 40 marks)

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

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General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

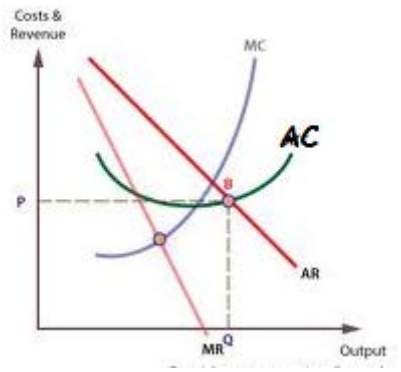
Knockout marks:
Candidates can be awarded up to 2 marks, 1 per point, for knocking out incorrect answers. This only counts if they have given a valid economic reason to go with their answer, where they have added value to the question.
E.g. for question 1, explaining it's not horizontal integration because that is where you merge/takeover a firm at the same stage in the production process/industry.
Candidates can also receive knockout marks without explicitly selecting a letter, if it's a clear reference is made to a **key**.
When the key is wrong a maximum of only 2 marks can be awarded (0+2)

Question Number	Answer	Mark
1	C	1
	Definition of forward vertical: merging with a firm at a ***later stage*** (e.g. closer to the customer, further away from the production stage) (1) of the same ***production process*** (1). Advantages to Ford might include: concentrated outlet, dedicated sales force, stronger brand awareness, barrier to entry raised/preventing competitors accessing the Arnold Clark show room (1+1). Allow 1 mark for likely impact on consumers e.g. less/restricted choice, higher prices (1).	3

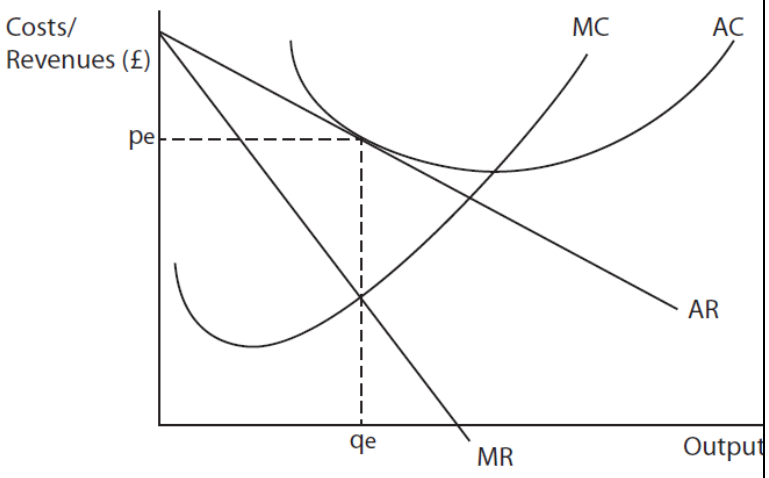
Question Number	Answer	Mark
2	D	1
	Perfect competition defined, or one characteristic (1), firm is making a loss (AC>AR) (1) but AR is covering AVC so it is making a contribution (1) to fixed costs (1). In the long run it will leave the industry, if total costs unchanged (1). Shading of the diagram to show loss (1) and/or contribution area (1) and firms leaving the industry diagram (supply shifts left) with consequent higher price (1).	3

Question Number	Answer	Mark
3	C	1
	Definition of supernormal profit, eg P>AC or (AR-AC)x quantity or TR-TC (1); profit maximisation occurs at MC=MR (1); use of marginal analysis; filling in columns correctly up to 4 units, see table below (1 mark for each correct column at least to output of 4 units) Example of rejection marks: it cannot be B because profit at output of 2 is £19 000.	3

Output per week	Total revenue (£'000s)	Marginal revenue (£'000s)	Total cost (£'000s)	Marginal costs (£'000s)	Total profit (£'000s)
0	0	-	10	-	-10
1	20	20	14	4	6
2	38	18	19	5	19
3	54	16	28	9	26
4	68	14	42	14	26
5	80	12	63	21	17
6	90	10	93	30	-3

Question Number	Answer	Mark
4	C	1
	Normal profits defined (e.g. the minimum necessary to keep resources in their current uses) (1); sales maximisation is AC=AR (1); rationale of the tyre company, e.g. to increase market share or knock out competition or limit pricing used as a barrier to entry (1+1). Diagram showing AC=AR (if not already awarded) (1) and the level of output marked (1) 	3

Question Number	Answer	Mark
5	A	1
	Identification of non-price competition, of which loyalty schemes are an example (1) Meaning of 'tacit' e.g. implicit, implied collaboration, informal (1). Firms are in an oligopoly/other sense of interdependence (1), reasons for tendency to collude, e.g. kinked demand so that when prices rise demand is elastic, and when prices fall demand is inelastic (1) with resulting loss in revenue (+1); firms try to avoid price wars (1); reasons for falling profits e.g. supermarkets have economies of scale (1). Collusion is illegal (1)	3

Question Number	Answer	Mark
6	E	1
	Characteristic/definition of monopolistic competition e.g. slightly differentiated goods, many firms, low barriers to entry (1) If there are supernormal profits, new firms will enter the industry (1) Normal profits defined (e.g. the minimum necessary to keep resources in their current uses) (1) Diagram showing long run monopolistic competition with AR=AC (1) at MC=MR output (1)  Example of rejection mark: it is not A because it operates where AR=AC which although at MC=MR this is not AR=MC.	3

Question Number	Answer	Mark
7	E	1
	Large firms can increase monopoly power (1) meaning they have more control over price and output (1); increased competition (or preventing it being reduced) means that there are lower prices and more choice (1); application – the merged firm would have a market share of 34.9% (1) post merger the 2 firm concentration ratio would be 74.8% (1); cost of merger (nearly $1 billion) is a sign of barriers to entry (1); role of competition authority – Federal Trade Commission (1)	3

Question Number	Answer	Mark
8	B	1
	Bensel will cut price because it gains higher returns (1) identification of overt collusion (1) Price war (1) with use of pay off matrix bottom right hand box (Nash's equilibrium) (1); long run possible return to top left hand box (Pareto optimum) (1); collusion is illegal (1); cut in prices when demand is relatively inelastic leads to lower total revenue (1); identification of oligopolistic market (1)	3

Question Number	Answer	Mark
Item 9a	Theory 2 marks: Oligopoly/Duopoly (1) – a few firms dominate the market (1) or interdependent (1) Monopoly (1) – single firm dominates the market (1) or abuses market power (1) Application 2 marks: Concentration ratio calculation(allow from 2 - 8 firms) (2); or other use of data, e.g. Otis is a strong brand name (1) very high fixed cost of manufacturing elevators (1); monopoly defined as more than 25% market share (1) plus Otis 27% (1)	4

Question Number	Answer	Mark
9b	Types of barriers to entry and explanation (2+2) or (3+1): • high start up costs • network of consumers with low PED/high brand loyalty • knowledge and expertise of elevator manufacture • award comments on exit barriers, e.g. difficulty of selling off parts of the business. (Baumol: Entry barriers can be reduced to exit barriers.) • High CR means that firms have more market power • Higher super normal profits – with consequent arguments relating to profit • High CR might occur because of economies of scale – evidence in passages, e.g. economies of scale from increased standardisation of elevators • Minimum efficient scale arguments Barriers could be considered from the viewpoint of consumers, firms or other stakeholders. Candidates can analyse/evaluate either way on barriers being significant or otherwise. **Evaluation** (2+2 or 3+1 or 4+0): • there are signs that the market will become more contestable e.g technological advances or competition authority rulings • the fines and other legal challenges mean that firms might be more welcoming to new entrants • difficult to know/lack of information • how cartel members rigged procurement contracts with a link to barriers to entry. • reference could be made to the relative impact on consumer and producer surplus • consideration of impact on price and loss of consumer surplus • magnitude of barriers	8

Question Number	Answer	Mark
9c	**KAA 6 marks** Award 2 reasons (2+2) or (1+3) Reasons for selling the mills: • loss of 1.8 billion euros, accounting for large part of 6 billion euros debt • Price below AVC, not covering variable costs • to raise finance to buy new companies and expand • to consolidate the business – remove inefficiency • to allow the firm to focus/specialise in areas it has most profitability/potential • selling off parts of the business as viable business concern before it becomes unsellable Diagram (2) showing AC>AR (1) at profit maximising output MC=MR (1) Do not award more than 4/6 KAA marks if there is no diagram or reference to the data. For example of application: Extract 1 eg productive inefficiency, excess capacity, 'worst investment in the company's recent history'. **Evaluation:** Award 3 factors up to 2 marks each or 2 reasons (3+3) • the mills are being sold at a loss. Is it a good time to sell? Are they still covering their AVC • benefits of vertical integration, e.g. vertical supply lines are ensured, competition is prevented, costs of supply will not have the intermediary mark up • The inefficiencies in the business could have been addressed and profits could have been made in the future. • May be a short-sighted decision. As the world economy recovers the demand, price and profits/losses of the plant may improve • The closing of the mills may result in loss of reputation for other parts of the business. • The closure is probably a combination of many factors, inefficiency, excess capacity, lack of expertise, lack of finance, all of which made the closure inevitable • The effectiveness of authorities/regulatory capture • To what extent are new firms deterred from entry • Are the fines sufficient to deter uncompetitive practices?	

Question Number	Answer	Mark
9d	KAA 8 marks Role of competition authorities – promote competition in consumer interest (1) Award 4 factors up to 2 marks each or 3 reasons (3+3+2) or (4 + 4) • Degree of competition/cartel/concentration ratio – e.g. rigged bids for contracts and shared information. • Is there collusion? Bidding practices/fixing prices • The public interest. Impact on consumer and producer surplus. • Discussion of barriers to entry in elevator industry (may refer to natural monopoly, but this term is not required) • Problems of regulation – regulatory capture • Asymmetric information • Government failure • Domestic vs global regulation powers Evaluation 8 marks Award 4 factors up to 2 marks each or 3 reasons (3+3+2) or (4 + 4) • size of fines can be very large • other regulatory powers can be very significant, e.g. jail terms for directors • some regulators do have expertise (symmetric information) • some kinds of regulation are more effective than others • Degree of competition/cartel/concentration ratio • Is there collusion? Bidding practices/fixing prices • The public interest. Impact on consumer and producer surplus. • Examine the contestability in the elevator industry. • The effectiveness of authorities/regulatory capture • To what extent are new firms deterred from entry • Are the fines sufficient to deter uncompetitive practices?	(16)

Question 10 Supermarkets

Question Number	Answer	Mark
10a	Theory (2) – surplus capacity means that the firm could sell more without increased fixed costs (1); average fixed cost/average cost rises (1) as less is sold with the same total fixed cost/total cost (1); TC relative to Q rises (1) why Q falls or TC rises (1+1). This can be shown by an upward shift in AC or AFC or an upward movement back along the AC curve (1). Application (2): Use of data might include consumers 'falling out of love with hypermarkets (1) due to reason such as: transport cost, budgeting, online competition, discount store competition (1 + 1); hypermarkets are sharing outlets – "shop in shop...recognition...surplus space" (1), Tesco's trying to get closer to consumers by buying coffee selling outlet H+H, buying Giraffe for £50 million (1) there are fewer hypermarkets (1)	(4)
10b	KAA 4 marks Award 2+2 or 3+1 Benefits of growth to H+H: • increased profits, • increased market share, • increased incomes for owners, access to shop space • stability of the firm through economic cycle, access to finance. Evaluation 4 marks. Award up to 2 factors (2+2) or (3+1). These may be the disadvantages of a link with Tesco, or other evaluative comments. Points might include: • The firm might lose its 'artisan' feel • Some people boycott/dislike Tesco on principle • Other problems of size – lack of dynamism, diseconomies of scale • Tesco is already experiencing falling profits *Candidates may suggest that H+H linking up with a company losing market share may not be a good idea. But Tesco is still by far the largest of the supermarkets.* • Tesco's short-termism means they take H+H profits rather than investing in them • Competitors respond	(8)

Question Number	Answer	Mark
10c	KAA 6 marks For explanation award up to 4 marks. Award 2 factors up to 2 marks each, or (3+1). There must be more than one reason. **Demand** has decreased with falling demand from online competition, and Britons 'falling out of love with supermarkets'. More competition from other firms means demand has fallen, e.g. rise of Lidl. **Cost** of acquisition of H+H and other brands mentioned in the extracts or other. Other cost rises. Reserve 2 marks for diagram: Diagram (award up to 2 marks) (AR and MR shift left (1) with new profit area (1) And/or AC and MC rise (1) with new profit area (1) (if variable costs changing) or just AC rising if fixed costs changing Or static diagram showing loss area when profit maximising (1) Do not award more than 4/6 KAA marks if there is no diagram or reference to the data. For evaluation 6 marks: Award 3 factors up to 2 marks each or 2 reasons (3+3) • Difficult to know the magnitude of the demand or cost shifts, which is most significant, or other weighing together of factors • This might be over-optimistic about end of recession • Difficult to know – need more information such as trend figures or profitability before 2012 • Tesco's future strategy may be successful resulting in increased profits and market share • The fall in profits may be temporary. For many years Tesco's market share and profits have been growing and may continue in the future • Tesco's retaliate online or discount stores	(12)

Question Number	Answer	Mark
10d	KAA 8 marks Award 4 factors up to 2 marks each or 3 reasons (3+3+2) Price strategies – predatory, limit, revenue maximisation (MR=0), BOGOF, cost plus, price discrimination. **Must be linked to revenue increases**, e.g. in the long run for predatory pricing Non-price strategies – loyalty cards, good sales information, after sales service, friendly service. **Must be justified as to why revenue increases** Other factors might include: • The monopsonistic pressure put on suppliers to reduce cost which can then be passed on to consumers • The effect of pricing strategies may involve examination of PED/YED, for example groceries have low YED • The effect on total revenue of diversification eg banking, electrical goods pharmaceuticals etc. with high YED. • Collusive behaviour, use of game theory - price fixing, non price strategies Award maximum of 6/8 marks if no reference to price or non price competition or supermarkets. Evaluation 8 marks. Award 4 factors up to 2 marks each or 3 reasons (3+3+2) • Some policies might fail, • Depends on the actions of other firms (game theory might be used) – prisoners' dilemma, whistle blowing, price war • Some policies such as collusion are illegal so will face fines • Cost of policies might outweigh the benefits, e.g. advertising • As real incomes have fallen over the past 5 years diversification may be counterproductive. ie demand may fall more than proportionately • Could raise revenues by opening new stores BUT profits may fall due to higher costs	(16)

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Write your name here

Surname	Other names

Edexcel GCE

Centre Number	Candidate Number

Economics

Advanced

Unit 3: Business Economics and Economic Efficiency

Tuesday 4 June 2013 – 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** 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.

Turn over ▶

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P 4 2 3 0 2 A 0 1 3 6

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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 A firm with monopoly power decreases the price of its product to increase its market share up to the output at which it just earns normal profit. Which of the following is the best description of the firm's objective?

(1)

A Profit maximisation in the short run

B Increased market contestability

C Revenue maximisation in the long run

D Sales maximisation

E Loss minimisation

Answer ☐

Explanation

(3)

(Total for Question 1 = 4 marks)

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2 Lufthansa, a German airline, owned British Midlands International (BMI), a loss-making airline. Lufthansa announced plans to sell BMI in November 2011. Which one of the following is the most likely reason for this sale?

(1)

A The BMI part of the business was facing increasing marginal returns

B BMI was experiencing falling marginal costs

C To benefit from conglomerate integration

D To increase market concentration

E To reduce diseconomies of scale

Answer ☐

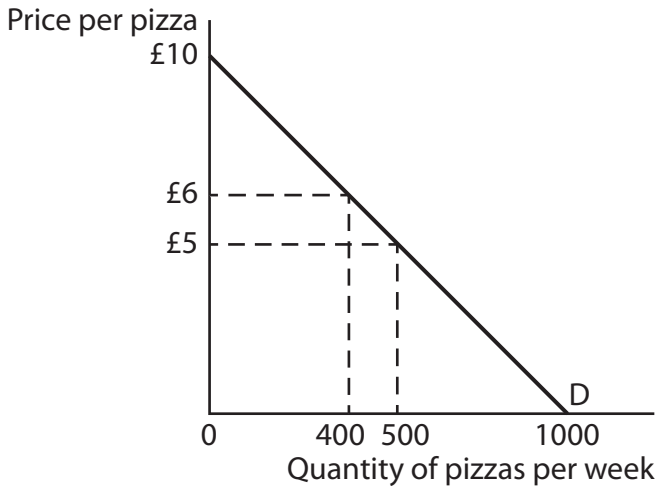
Explanation

(3)

(Total for Question 2 = 4 marks)

3 A pizza restaurant faces the following demand curve (D). Which one of the following is necessarily true?

(1)



A Marginal revenue will be positive then negative as price falls

B Revenue maximisation occurs at a price of £6

C Sales are maximised at a price of £6

D Average revenue will equal zero where price elasticity of demand is unitary

E Cutting the price from £6 to £5 will increase profits

Answer ☐

Explanation

(3)

(Total for Question 3 = 4 marks)

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4 A sports equipment chain of shops faces a downward sloping demand curve and is making supernormal profits. The impact of a significant rise in the **rent** for the shops is likely to lead to

(1)

	Price	**Profit**
A	No change	No change
B	Rise	No change
C	Rise	Fall
D	Fall	Fall
E	No change	Fall

Answer ☐

Explanation

(3)

(Total for Question 4 = 4 marks)

5 X-inefficiency is most likely to exist in markets where

(1)

A new firms have recently entered the market

B there are long-term patents in place

C there is a high level of contestability

D the conditions for price discrimination are not met

E concentration ratios are low

Answer ☐

Explanation

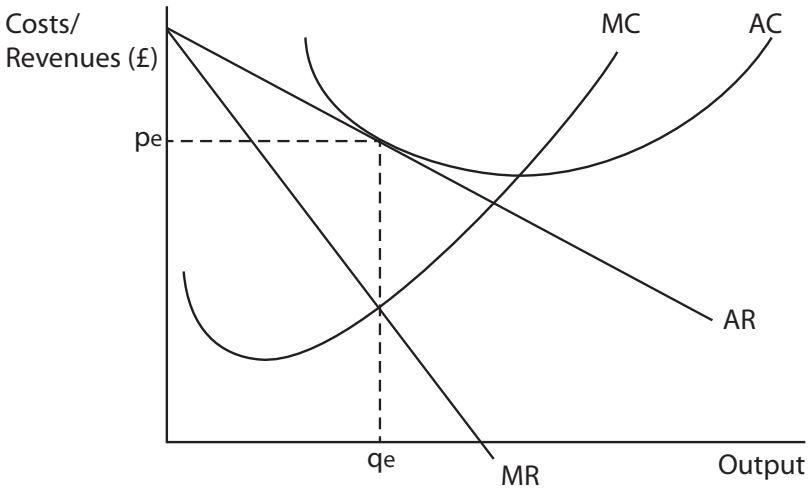
(3)

(Total for Question 5 = 4 marks)

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6 A small profit maximising café faces the following cost and revenue curves. It is noted that the café is never full.



Which one of the following is most likely to apply to this café?

(1)

A It is productively inefficient in the long run

B It is making supernormal profits

C There is evidence of collusion

D It operates in a perfectly competitive market

E It is allocatively efficient in the long run

Answer ☐

Explanation

(3)

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(Total for Question 6 = 4 marks)

7 Severn Trent Water is a local monopoly supplier of water in the Midlands. In 2008 it was fined by Ofwat, the water regulator, and required to reduce its planned charges. The most likely effect of this decision would be to

(1)

A increase producer surplus

B substantially lessen competition

C increase monopsony power

D satisfy the shareholders

E increase consumer surplus

Answer ☐

Explanation

(3)

(Total for Question 7 = 4 marks)

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8 A commodity is traded under conditions of perfect competition. Which one of the following is a likely impact of exit from the industry by a large number of loss-making producers?

(1)

A Firms remaining in the market will cut their prices

B Firms remaining in the market will keep their prices unchanged

C Firms will operate where their average revenue is greater than their marginal revenue

D Firms remaining in the market will make normal profits in the long run

E Demand for the commodity will expand as prices fall

Answer ☐

Explanation

(3)

(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 23.

You should spend 55 minutes on this section.

9 Egg farming, egg distribution, food manufacturing and supermarkets

Extract 1 A letter from a chicken farmer

Our problems started four years ago when the big egg packaging and distribution firms merged, purchasing nearly 70% of the eggs produced. I lost £40 000 last year and I could see the profits of Noble Foods [the UK's biggest egg distributor] increasing. There was no competition anymore and prices paid to egg farmers stayed low, while everything else, like the cost of chicken feed, was going up. New EU regulations preventing the housing of hens in conventional 'battery' cages have meant installing new cages, costing over £14 per hen. Many egg farmers like me are unable to absorb the costs of buying the new cages and some egg farmers have left the industry. 750 000 hens have been slaughtered across the UK.

Extract 2 The egg distribution business - profile of Noble Foods Limited

Noble Foods, the UK's largest egg packaging and distribution business, operates 160 vehicles from seven sites, 365 days a year, employing over 150 full-time drivers in temperature controlled vehicles. Eggs are collected from over 325 individual farm producers located throughout the UK and transferred to a packing centre, where they are sorted and boxed for delivery to customers. Pre-tax profits at Noble Foods increased by £1.4 million in 2011.

(Source: © 2011 Noble Foods Ltd)

Extract 3 Increased costs of eggs for food manufacture

Eggs – both in liquid and powdered form – are used in a variety of food products from biscuits and cakes to pasta and mayonnaise. The reduced supply of eggs, caused by the new EU regulations, is damaging the profits of some food manufacturers. Several of them are closing down their production lines because they cannot afford the soaring cost of eggs from distribution firms. However, they cannot raise their prices because supermarkets refuse to pass on any increase to consumers.

Extract 4 British farmers forced to pay the cost of supermarket price wars

Farmers say they are being forced out of business by the unfair buying practices of supermarkets. Discounts such as "buy one get one free" are not a generous gift from the supermarket. There is public ignorance of how supermarkets buy produce and the system that allows them to offer lower prices while increasing their profits. Tesco's profits were above £3.5bn for the first time last year and Sainsbury's rose by nearly 13%. These results are achieved largely by getting suppliers to reduce their prices or not pass farmers' cost increases through to the supermarkets. Most sectors of British farming, from eggs to fruit, vegetables and pork, have had reduced prices paid for their produce in the past year, despite record increases in costs.

(Sources 1, 3 and 4: adapted from © The Guardian 2 July 2011, © The Observer and © Parliamentary copyright 2011)

Figure 1 Egg types in the EU

Types of eggs produced in EU	Minimum cage requirements per hen	Market share in UK, 2012 forecast
Hens in conventional cages, 'battery'	550cm^2	Banned January 2012 under new EU regulations
'Caged' hens in EU-compliant cages	750cm^2 and a minimum height of 45cm with nest area, perching space and a scratching area	49%
Barn eggs	1110cm^2 free to move in large indoor area	4%
Free range eggs	As barn, with daytime access to open air pen, 4m^2	44%
Organic free range eggs	As free range, plus organic food (no artificial growth enhancers)	3%

Figure 2 UK egg market information 2011

Egg production	9 691 million eggs
Egg consumption	11 512 million eggs (32 million per day)
Consumers of eggs in the UK	
Retail (supermarkets etc.)	47%
Food Manufacturers	25%
Foodservice (hotels, restaurants)	28%

(Sources for Figure 1 and Figure 2: permission to reproduce granted by the British Egg Information Service, www.britegg.co.uk and © European Union, http://eur-lex.europa.eu/)

(a) Using the information provided, explain the market power enjoyed by egg packaging and distributing firms, such as Noble Foods, when buying eggs from chicken farmers.

(4)

(b) Using a cost and revenue diagram, examine why some egg farmers are leaving the industry. Refer to Extract 1 in your answer.

(8)

*(c) Discuss the effects of increased EU regulations on egg consumers. Refer to Figure 2 in your answer.

(12)

*(d) Assess reasons why supermarkets are not increasing the retail price of eggs to cover the increased production costs of egg farmers. Use game theory to support your answer.

(16)

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(12)

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*(d) Assess reasons why supermarkets are not increasing the retail price of eggs to cover the increased production costs of egg farmers. Use game theory to support your answer.

(16)

(Total for Question 9 = 40 marks)

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If you answer Question 10 put a cross in this box ☒

10 The UK household energy market

Extract 1 Price cuts by the 'Big Six' energy companies

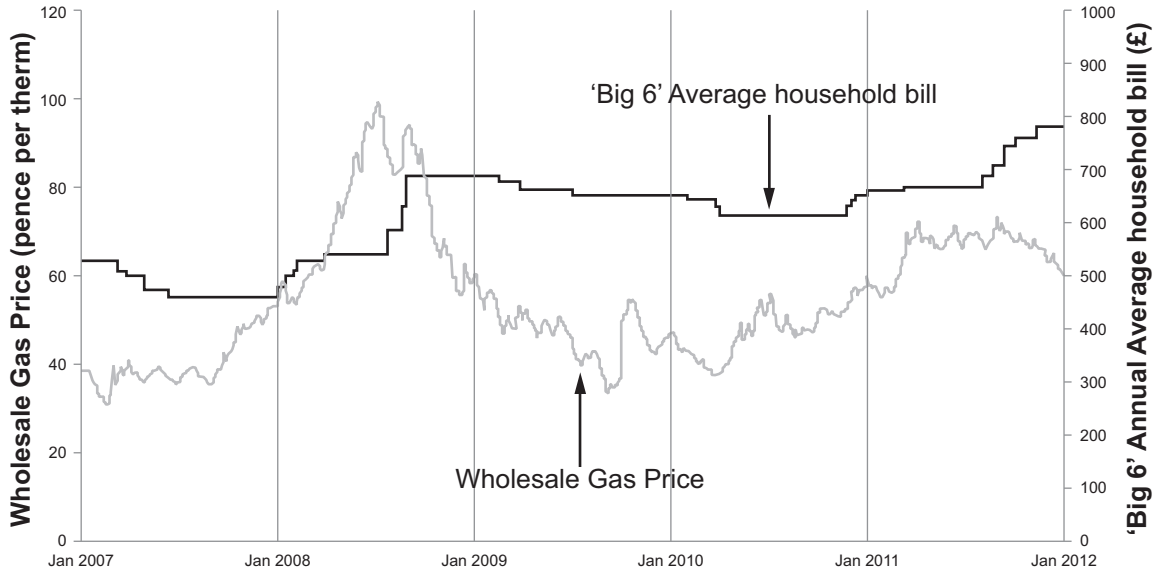
99% of all gas and electricity bought by households in the UK is supplied by the 'Big Six' energy firms, British Gas, Scottish and Southern Energy (SSE), Scottish Power, E.ON, EDF Energy and npower. The combined profits of the 'Big Six' reached £15 billion in 2011, up £2 billion on the previous year, with an average profit per customer of £80 a year.

British Gas, which supplies both gas or electricity to half of UK households, cut its electricity prices by 5% in February 2012 but kept gas prices unchanged. This was quickly followed by SSE cutting 4.5% from its gas prices. British Gas had been expected to cut prices after another of the 'Big Six' energy providers, EDF Energy, announced it would be reducing gas prices by 5% with effect from 7 February 2012.

However, the cuts were smaller than expected. The average standard tariff for a customer buying both gas and electricity from the same supplier will remain on average £1 250 a year (doubled since 2005). The price cuts will only reduce bills by between £24 and £28 per year for the average household. 5.5 million households will remain in fuel poverty, meaning that they are spending at least 10% of their income on power.

(Source for Figure 1 and Extract 1: adapted from © The Guardian News and Media Limited, 2012)

Figure 1 A comparison of wholesale and retail price of gas



Extract 2 Energy regulator tells firms to cut their prices or face tough controls

A price cap, RPI-X, on energy bills could be introduced for the first time since 2002, according to the regulator Ofgem. There are rising concerns that customers are being exploited by the 'Big Six' energy firms. The energy firms will have to simplify their pricing structures (tariffs) this year. If this fails the whole industry will face a Competition Commission inquiry which could force a break-up of its dominant players. Ofgem said: "Parliament has given us the task of trying to create an effective market where competition is the downward pressure on prices. We think that's the way to go, although we haven't ruled out regulation, particularly for more vulnerable customers, if our reforms don't work." Energy campaigners are calling for a windfall tax on excessive energy profits and for the money to be used to help in the fight against fuel poverty by making homes more energy efficient.

Rising global demand for energy and the end of cheap North Sea gas are responsible for most of the increases but consumer groups also believe suppliers are keeping bills artificially high. One of the 'Big Six', the French-owned EDF Energy, reported a near trebling of its annual profits to €3 billion (£2.5 bn), with profits from its British operations rising 8.5%. EDF Energy is currently the subject of two Ofgem investigations into poor customer service and inappropriate selling methods. Ofgem is currently consulting on forcing the 'Big Six' to set uniform standard charges to allow consumers to compare raw costs, or unit prices, more easily. Ofgem is also intending to sweep away the hundreds of different tariffs operated by the companies into just two types – standard and innovative. In 2008 Ofgem ran a nine-month inquiry after all the energy companies raised their prices within a few weeks of each other. No evidence of collusion was found but action was proposed to ensure that smaller independent companies are not kept out of the supply market. The price movements look like tacit collusion but the regulatory authorities lack the power to prove this.

Ofgem's faith in an unregulated free market has been shaken by the failure of the 'Big Six' to embrace its previous reforms of bills and tariffs. Although it says it is "encouraged" by recent attempts by some suppliers to simplify charges, it is closely monitoring their performance and failure to comply will trigger a full Competition Commission inquiry. Companies need to narrow the widening gap between wholesale and household energy prices. "Consumers are right to ask whether the market structure is right and whether regulation of prices is the answer," said Ian Marlee, a senior Ofgem official.

(Source: adapted from Martin Hickman © The Independent, www.independent.co.uk and © http://www.regulation.org.uk/energy.shtml)

(a) With reference to the information provided, what market structure best describes the supply of household energy in the UK?

(4)

(b) Using the information provided, discuss **one** reason why the 'Big Six' energy firms have seen combined annual profits rising to £15 billion since 2009. Illustrate your answer with a cost and revenue diagram.

(8)

*(c) Discuss problems faced by regulators when investigating an issue of 'tacit collusion' (Extract 2, line 25).

(12)

*(d) Assess the case for creating an 'effective market where competition is the downward pressure on prices' (Extract 2, lines 6–7), rather than price cap regulation.

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(4)

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(16)

(Total for Question 10 = 40 marks)

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

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Mark Scheme (Results)

Summer 2013

GCE Economics (6EC03/01)

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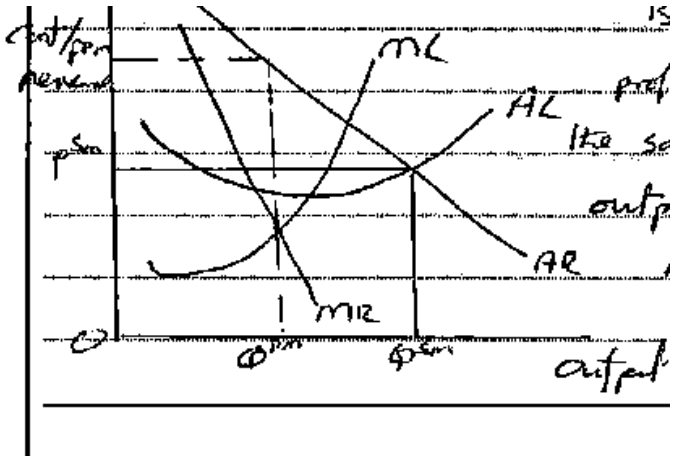
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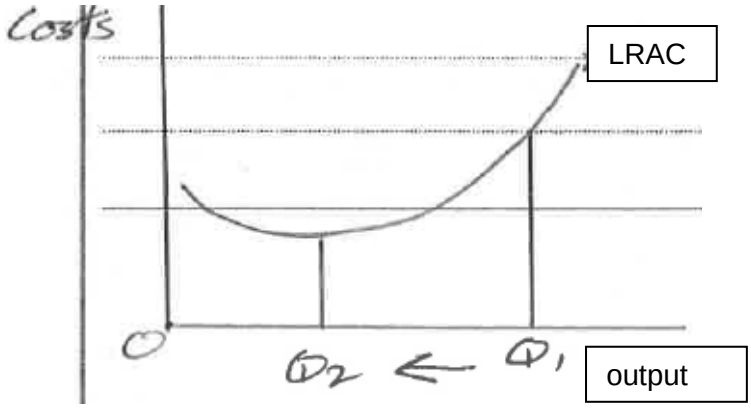
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General Marking Guidance

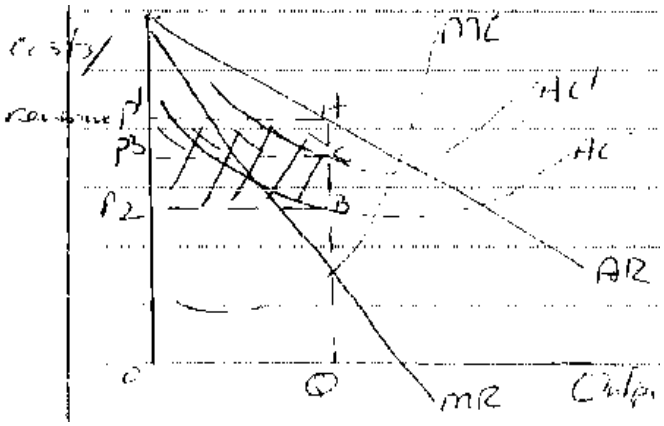
- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

Maximum mark for explanation is 2/3 if key is incorrect (that is 2/4 in total) for supported choice questions.
Knockout marks: Candidates can be awarded up to 2 marks, 1 per point, for knocking out incorrect answers. This only counts if they have given a valid economic reason to go with their answer, where they have added value to the question. E.g. for question 1, 'It is not A because this option ignores costs, but costs must be taken into account for normal profit AR=AC' is worth 1 mark.
Candidates can also receive knockout marks without explicitly selecting a letter, if it's a clear reference is made to a **key**.

Question Number	Answer	Mark
1	**D** Definition of *monopoly power* (not monopoly alone): firm has power to set prices or output/ firm is a price setter or price maker (1); Explanation of sales max: selling as much as possible without making a loss (1); where AR = AC (1); or maximising sales subject to the *constraint* of making AR=AC (normal profit) (1); Explanation: explanation of normal profit, e.g. just enough profit to keep resources/firms in their current use (1); market share increased at expense of competitors (1); a lower price means that more is demanded (1); Reasons for this objective: to remove competition (1); limit pricing (1); long run profit maximisation by removing competition or gaining loyalty (1); Diagram showing fall in price and/or higher output (1) at AC=AR (award AC=AR point only if not defined or otherwise used in answer) (1);  Examples of knock-out mark: It is not A because the firm is cutting prices to prevent new firms entering, so it is sacrificing short term profits for long term benefits It is not C because this option ignores costs, but costs must be taken into account for normal profit AR=AC.	**(4)**

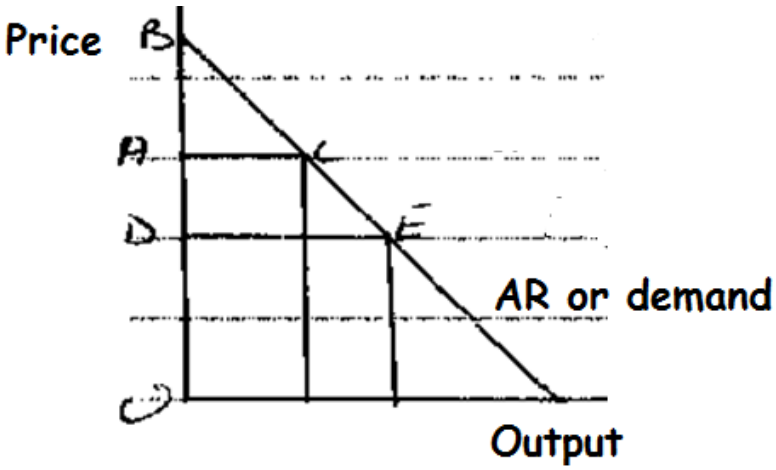
Question Number	Answer	Mark
2	**E** Definition of diseconomies of scale/economies of scale, involving falling *long run* average costs as output decreases/increases (1); Observation that this is a divestment/demerger (1); Explanation: reasons why a larger firm might have increased costs, e.g. communication problems, lack of co-ordination; differences in methods of organisation or IT systems, lack of crossover (1+1); allow another reasons for demerger, e.g. to raise funds, to focus on core business, too much exposure to one market, need to reduce costs (1); Effects of selling off BMI, e.g. rationalisation, more efficient production (1); Application marks: there might be a cut in overlapping routes, more efficient use of marketing just one brand (1); Diagram showing falling costs as output falls, for example: (1)  Example of a knock out: not D as there will be more firms in the industry if firms break up	**(4)**

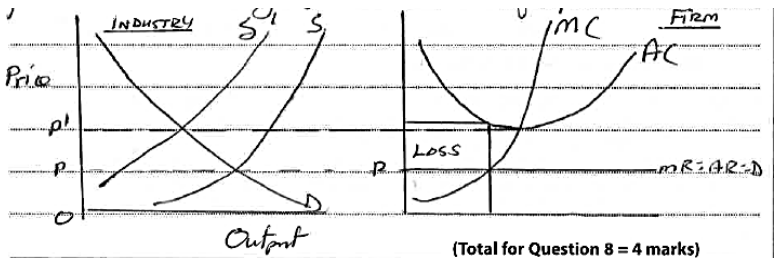
Question Number	Answer	Mark
3	**A** Definition of marginal revenue (1); Diagram marks or equivalent verbal analysis: annotation of diagram or separate diagram showing parabola shaped TR (1); MR crossing horizontal axis where TR reaches the maximum (1) **or** at output 500 (or close) (1); relationship between AR(=D) and MR, e.g. if the demand curve is downward sloping the MR curve will be below it and steeper (1); relationship between MR and TR, e.g. if MR>0 then TR is rising (1); relationship between AR and/or MR and price elasticity of demand (PED) e.g. if PED is elastic MR is positive (1); if PED is inelastic MR will be negative (1); Application mark: revenue rising from £2400 at output 400 to £2500 at output 500 (1); £5 is revenue maximising (1) Example of knock out mark: it is not E because there is no consideration of any costs. Example of knock out mark: it is not B because there is no indication that the firm is operating at 500 units.	**(4)**

Question Number	Answer	Mark
4	**E** Definition: rent is a fixed cost, or, definition of fixed costs, e.g. do not change with output (1); Explanation: because there is a change in fixed costs there is no impact on marginal cost (1); if marginal costs do not change and marginal revenue stays the same then there is no change in equilibrium price and output (1); Diagram showing increase in average variable costs (AVC) or average total costs (AC)(1) with the same price and the same output coinciding with the same MC=MR (1) Diagram can earn 3 marks if each point is clearly spelt out: AC rises (1) reducing the profit area as long as MC has not shifted (1) but price is unchanged as long as MC is not shifted (1) (Max. 1 mark for diagram if MC has shifted)  Award equivalent verbal analysis, e.g. if costs rise then profits fall (1); Example of knock out mark: it cannot be A or B because if costs rise then profits will fall (but **do not double award** this analysis if it has already been awarded as verbal or diagrammatic analysis, e.g. lower profit area) (1).	**(4)**

Question Number	Answer	Mark
5	**B** Definition of **x-inefficiency**, e.g. when lack of competition means that costs are higher than they would be with competition (1); examples of x-inefficient behaviour: satisficing profits, organisational slack, rising average costs of labour as wages rise or over-manning, laziness, complexity, management with other aims such as luxury cars (1+1); Explanation of **patents**, e.g. legal barriers which prevent copying of names or concepts by rival firms these act as a barrier to entry (1) meaning that new firms cannot enter/force existing firms to cut their prices or costs – there is no need for existing firms to cut costs (1); Reasons why x-inefficiency exists: firms can become a monopoly, firms gain market power (1+1); Diagram showing two average costs curves, one AC higher than they would other be when x-efficient, or a point above AC (1); Example of knock out mark: it cannot be C as barriers to entry will be high (1).	**(4)**

Question Number	Answer	Mark
6	**A** Definition of productive efficiency, e.g. lowest point on the average cost (AC) curve, or MC=AC (1); MC=MR is profit maximisation (1); Explanation: firm is operating under **monopolistic competition** (1) in the long run (1); other characteristic of monopolistic competition (note this must be consistent with the model, and not be a defining characteristic of monopoly) e.g. similar but differentiated products, a large number of small firms, low barriers to entry or exit (1); There are only normal profits in the long run diagram shown, or AR=AC means there are no supernormal profits (1) prices cannot fall any lower because costs are not as productively efficient as possible (1); Annotation of diagram, e.g. to show productive efficiency at the lowest point of AC (1); Example of knock out mark: it cannot be B because the firm is making normal profits (1) (if this has not been awarded as part of the analysis). Example of knock out mark: not D because the AR and MR are downward sloping (1).	**(4)**

Question Number	Answer	Mark
7	**E** Definition of consumer surplus (1); A fall in price makes the area of consumer surplus larger (1); Explanation of role of Ofwat, or regulators in general (1); function of fine as a deterrent (1); explanation of how a price cap works e.g. firm will have to reduce planned charges so that it can no longer earn the monopoly profits (1); Explanation of a *local* monopoly, e.g. that the firm has a very high degree of market power within a geographical region (1); application that consumers in the Midlands can only buy water from Severn Trent (1); Diagram: shading of area of original consumer surplus (this can count as the definition if not already awarded) (1); new area of consumer surplus, or change in consumer surplus e.g. ACED with comparison with a profit maximising output where MC=MR (1);  Allow other versions of this diagram, involving AR/MR and AC/MC, or demand and consumer surplus in style of Unit 1 paper. Diagram may show fall in price and increase in output as a result of intervention (1) and change in consumer surplus (1). Example of knock out mark: not D because shareholders would be likely to receive smaller dividends.	**(4)**

Question Number	Answer	Mark
8	**D** Characteristic of perfect competition, e.g. no barriers to entry/exit, AR=MR, many firms all selling exactly the same product (1); Explanation: firms leave because the price is below AVC or AC or shut down point (1); barriers to entry/exit are low making it **easy** to leave (1); which makes the industry price rise (1) normal profits is the level at which firms will stop leaving (1); Diagram can earn up to the maximum 3 marks: • horizontal AR=MR (as characteristic of perfect competition – do not award this in addition to any perfect competition definition/characteristic in text)(1), • firms leaving (1) • loss area (1); • long run perfect competitive firm equilibrium diagram i.e. AC at tangent to horizontal AR (1) This diagram shows horizontal AR=MR and the loss area on the right hand side, and the supply shift to the left on the left hand side shows firms leaving:  (Total for Question 8 = 4 marks) Example of knock out mark: not A because perfectly competitive firms are price takers so cannot cut prices.	**(4)**

Question Number	Answer	Mark
9(a)	Theory (2) Monopsony (1), explanation, e.g., single buyer or powerful buyer dominates the market (1). Seller has to accept low prices (1). Purchasing economies of scale (1). Pressure on sellers' profits/viability (1). [Award relevant monopsony diagram, e.g. showing **low prices relative to marginal cost**, although this is **not** required.] Application (2) as (1+1 or 2): Buyers force down prices (award lower prices for theory or application but do not double award) (1); farmers cannot cover costs/make a loss (1); buying power 70% of market (1);there are many egg farmers with small holdings in Extract 1 (1); Noble Foods acts as a powerful firm (1); Noble Foods' profits are increasing (1); there are no effective substitutes for famers to sell to (1); many farms are being shut down (Extract 1); 750 000 hens slaughtered (Extract 1).	**(4)**

Question Number	Answer	Mark
9(b)	KAA (4) Explanation (2): • 1 mark for costs are rising/price not rising • 1 mark for application or reason from data in Extract 1. Examples of application marks: costs of eggs are rising because of new regulations. Price is not rising because egg distributors such as Noble, or supermarkets will not pay higher prices, or prices are being cut. Diagram (2) This can be a costs shift or a revenue shift, or static diagram (no shift). • MC=MR equilibrium connected with price (1) • Loss area (or lower profit area) 1 Evaluation (4): • Depends on the proportion of egg cost relative to other production costs • If price>AVC the firms will stay in business in the short run even though it is making a loss • Rising costs could be offset by falling costs elsewhere • Free range egg producers will not get a rise in costs • How long is the long run • Some egg consumers are loyal to farmers so could withstand a rise in price • Higher prices are good for the final consumers if quality improves (e.g. eggs taste nicer from happier hens) • Sense that the problem is made worse by other factors. E.g. if there has been a cost rise AND a fall in revenue	

	then these make it a bigger problem	**(8)**

Question Number	Answer	Mark
9(c)*	KAA (6) award up to 3 points (2 marks each) or 3 + 3 Identification of types of egg consumers from Figure 2, e.g. foodservice. There must be specific reference to types of consumers, market shares, UK imports eggs (consumes more than it produces), or any use of data (1) award up to 3 points (2 + 2 + 2) or (3 + 3): • Consumers: Better quality eggs • Consumers know that hens are not ill-treated – increase in 'consumer welfare' • Reward candidates who offer a standard answer of rising costs and prices • Consumers might have less choice of food as food producers avoid eggs • Food processors/manufacturers using eggs may go out of business, reduce quality or range of products, or see profits fall, as they are unable to raise prices to supermarkets (Ext 4). Prices of food might rise in the long run. • possibility of imported eggs from countries outside the EU • Foodservice users such as bed and breakfast suppliers may have to raise prices and reduce output. Allow answers based on EU regulation in general, apart from the hen cage regulation in passage. *If no reference to egg consumers in Figure 2 then cap KAA at 5/6* Evaluation (6) award up to 3 points (2 marks each) or 3 + 3: • Consumers may not see much change as eggs are a small proportion of household expenditure. The effect is minimal. • Many consumers already buy eggs that conform to the EU welfare standards, e.g. 44% free range • Because of the monopsony power of supermarkets egg prices are unlikely to rise significantly so the impact on consumers of the new regulation are likely to be minimal. • Eggs might not look/taste any different but the quality might be perceived as being better, e.g. through effective marketing • Farms might cut cost in other areas (e.g. cheaper quality hen feed) so quality for consumer might decline • Investment in cages is a short run, sunk cost. • Depends on the proportion of egg cost in food	

	manufacture, and the cost of other ingredients might fall • Depends on proportion of costs in foodservice – in high end hotels the cost of an egg is likely to be a small proportion of overall costs • Depends on cost difference between eggs outside EU as to the degree to which they might be used to substitute EU eggs • Hard to measure the impact on consumers of happier hens • Allow arguments concerning regulatory failure.	**(12)**

Question Number	Answer	Mark
9(d)*	KAA (8) 2 + 2 + 2 + 2 or fewer points up to four marks each 2 marks for correct pay off matrix, if correct and applied. Reasons might include: • Monopsony power of supermarkets, squeezing suppliers to retain their own margins • Need to keep prices low for customers in time of low incomes • highly competitive markets • high price elasticity of demand • Price leadership/collusion • Sticky prices/kinked demand analysis and possibly the discontinuous MR curve to illustrate why supermarkets are not raising their prices • to maintain market share • Eggs might be cross-subsidising other products in the supermarket such as loss leading milk • Allow arguments based on pricing strategies, e.g. limit pricing/predatory pricing, where cutting prices might be seen as keeping prices lower than they would have been. • Allow other non-pricing strategy reasons, 'non-price competition' such as branding, advertising e.g. The Happy Eggs company *If no game theory used award a maximum of 6/8 marks* Evaluation (8): 2 + 2 + 2 + 2 or fewer points up to four marks each • Depends on the degree of monopsony power • Difficult to assess the strength of monopsony power • It may be a matter of time before the higher egg prices feed through to consumers. • This might be explained with MC shifting out of the range of indeterminacy on the kinked demand model • The increase in cost are short term (£14 per hen) • Increased price might be outweighed by falling costs elsewhere. • Prices of eggs might rise as some producers leave the industry • Eggs are a small percentage of consumer costs/food producer costs • eggs have no close substitutes • collusion is illegal/risk of fines • Depends on the egg type as to how loyal the customers are (free range etc.) • Consideration of non-price strategies as an alternative to price changes • Other elasticity arguments, e.g. can firms change the PED of eggs in the future	**(16)**

Question Number	Answer	Mark
10(a)	Theory (2): oligopoly (1). A few firms dominate (1) or other explanation, such as interdependence, high barriers to entry/exit, highly concentrated Application (2): 6 firm concentration ratio (CR) is 99% (2 marks); or Big Six have 99% (1 mark), Other types of application (1+1): high barriers to entry/exit are applied, e.g. cost of setting up customer network, strong brand names, Big Six control 99% of market, other specific evidence of collusion, high profits as evidence of barriers to entry, small firms find it hard to enter the market, SSE cut prices 4.5% and BG will follow, price fixing of tariffs, £15bn combined profit, existence of regulator, BG supplies half of UK households, list of the six biggest firms	**(4)**

Question Number	Answer	Mark
10(b)	KAA (4) Costs of gas and electricity have not risen as fast/fallen more quickly than the price charged to customers; global demand has risen, cartel, collusion meaning prices rise to consumers. Award **one** reason only – costs not rising (or efficiency gains) or revenue (demand) increasing(1); application to energy market (1) Diagram (2) This can be either cost or revenue changes, or both. There must be a **shift**. • 1 mark for correct shift (AC and MC if variable cost falling, AC if fixed cost falling, AR and MR rising if demand) • 1 mark for profit area. It must be a profit, linked to MC=MR. Evaluation (4): 2+2 or 4+0. Points might include: • Comment magnitude of profits • Depends on size of shifts • Profits might fall in future • Contrast between gas and electricity prices • Difficulty of making conclusions from data provided • The apparent collusion might just be the way that oligopolistic markets work • The market may be regulated more in future	**(8)**

Question Number	Answer	Mark
10(c)*	KAA (6) award up to 3 points (2 marks each) or 3 + 3 1 mark definition of tacit collusion. Implied, silent, unspoken, no communication. Saying 'secret' is not enough (this is covert collusion). 1 mark for role of regulator Application: evidence of possible tacit collusion might include: consumer bills double simultaneously, prices rise and fall within weeks of each other, difficult to prove (1+1) **Answer must be based on tacit collusion (collaboration is implicit) e.g.** *implied, unspoken, quiet, unsaid* **collaboration otherwise cap at 5/6 KAA marks.** Problems regulators might face 3 x 2 marks or 2+2+2 • Hard to find evidence • Lack of spoken or written evidence • Regulatory capture • Conflicting or asymmetric information • Complex information, e.g. The involvement of supermarkets and joint supply of gas and electricity makes comparisons more difficult. • The complexity of the tariffs in particular make it very hard to compare different providers • Conflicting evidence – e.g. it might be markets forces or collusion in an oligopoly • Fear of fines or other control mean that there is strong incentive to conceal collusion. This might be developed using game theory and/or kinked demand theory • Lack of regulator power • Lack of regulator resources • Time/admin costs of regulation • Regulatory lag • Firms will not respond to regulator – unlikely to whistleblow • Consumers are not aware of the problem and do not complain much or understand they have been 'ripped off' • The amount of evidence needed to prove the case may be huge	

	• Many firms have foreign ownership – may be an EU regulator issue. May be a conflict between regulatory authorities. Evaluation (6): 3 x 2 marks or 2+2+2 • There is a lot of evidence to prove tacit collusion, e.g. sudden price changes • Magnitude of problem of detecting collusion/monopoly power • Maybe tacit collusion does not exist and energy companies are simply following global wholesale prices • Impact of changing exchange rates on costs • Energy prices are only sticky in a downward direction not in an upward direction. • The relative size of the resources available to regulators compared to 'Big Six' energy companies determines the balance of power. • No need for collusion where barriers to entry are so high. • Pricing strategies discussion, e.g. some are illegal and some are not • Tariffs have been simplified – it will be easier to prove from now on • Size of fines/penalties – jail terms and fines of 10% are a strong deterrent (or not) • Internet has made comparisons more easy, e.g. U-Switch • Supermarkets have now entered the market, which can mean non-price competition points become more important, e.g. loyalty points • Game theory may be used to discuss benefits of whistleblowing • Collusion is not a problem to investigate – it is easy to see.	**(12)**

Question Number	Answer	Mark
10(d)*	KAA (8) 2 + 2 + 2 + 2 or fewer points up to four marks each Allow reasons for and against competition or regulation either as KAA or evaluation, depending on the structure of the argument presented. The **case for competition** rather than price caps might include (free market argument rather than government intervention): • Breaking up the size of energy suppliers will lead to price cuts (impact on competition) • Impact of competition on efficiency (this could count as several points) • Encourages more firms to enter energy market (benefits of deregulation) • Benefits of market forces as allowing incentives to invest or innovate • Impact on consumer surplus/consumer welfare • Reduced profits might lead to lower levels of investment in infrastructure or other kinds of investment • Look at global competition rather than just domestic • Problems of price controls e.g. price cap may be difficult to maintain in the long run because of the above inflation rises of wholesale energy prices, or firms will raise prices up to price caps and not be any more efficient than that. Diagrammatic analysis could be included and rewarded. Evaluation (8): 2 + 2 + 2 + 2 or fewer points up to four marks each The case for price caps/regulation rather than competition, or allow other forms of evaluation • Benefits of price caps as a surrogate or substitute for competition e.g. in providing incentives to increase efficiency • Discussion of length of term of price cap, and other problems of RPI-X • Examination of vertical integration in the energy market • High barriers to entry/sunk costs means that competition will not work • Competition leads to loss of economies of scale; prices might rise not fall • Discussion of which controls might be the most effective, in the light of the information provided • Discussion of other forms of intervention governments could use, e.g. tax on profits, fines, performance targets. Could count as several factors.	

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Edexcel GCE

Centre Number	Candidate Number

Economics

Advanced

Unit 3: Business Economics and Economic Efficiency

Tuesday 12 June 2012 – 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** 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.

Turn over ▶

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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 In 2010 the assets of ROK, a building maintenance firm, were acquired by Balfour Beatty, which also maintains buildings as part of its operations. This type of integration of business assets is:

(1)

A Satisficing

B Privatisation

C Backwards vertical

D Forwards vertical

E Horizontal

Answer ☐

Explanation

(3)

(Total for Question 1 = 4 marks)

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2 A firm operating under conditions of perfect competition is making supernormal profits. What is likely to happen to this firm in the long run?

(1)

A The price of its product will rise

B It will leave the industry

C Both its output and price will fall

D Its output and price will remain unchanged

E Its output will rise and its price will fall

Answer ☐

Explanation

(3)

(Total for Question 2 = 4 marks)

3 In a review in March 2011 Ofgem, the energy regulator, reported that it had concerns over the vertically integrated energy markets. The figure below shows the UK market share of the largest vertically integrated energy firms:

	Percentage of UK market (volume of sales)
EDF Energy	24%
E.ON	12%
RWE npower	10%
SSE	10%
ScottishPower	9%
Centrica	6%

(Source: © Crown Copyright)

The most likely reason for Ofgem's concerns is:

(1)

A There is a low level of producer surplus

B Vertical integration tends to decrease the concentration ratio

C Centrica is too small to achieve economies of scale

D Vertical integration can create a barrier to entry

E EDF Energy is a legal monopoly

Answer ☐

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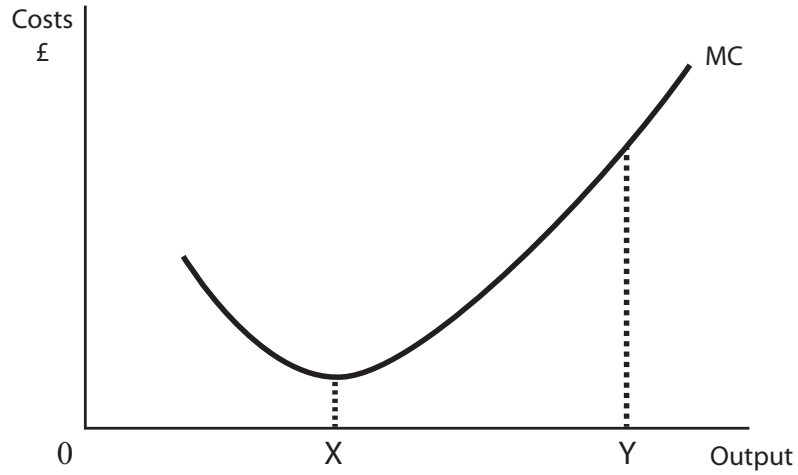
Explanation

(3)

(Total for Question 3 = 4 marks)

4 Which of the following best explains the shape of the short run marginal cost curve between X and Y?

(1)



A The law of diminishing marginal returns

B The law of increasing marginal product

C Average costs are rising

D Average variable costs are rising

E Economies of scale

Answer ☐

Explanation

(3)

(Total for Question 4 = 4 marks)

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5 Lizzie runs a hairdressing shop and the following table shows her costs and revenues in a fixed time period when she changes her prices for a haircut. Some parts of the table are left blank for your own calculations.

Quantity	Price (£)			Total costs (£)	Marginal costs (£)
0	11			5	–
1	10				4
2	9				5
3	8				6
4	7				8
5	6				10

At what range of output would Lizzie achieve profit maximisation?

(1)

A 0 – 1

B 1 – 2

C 2 – 3

D 4 – 5

E She cannot make supernormal profits at any output.

Answer ☐

Explanation

(3)

(Total for Question 5 = 4 marks)

6 In January 2010 the Office of Fair Trading (OFT) referred the UK's local bus services to the Competition Commission over concerns about pricing. It had received complaints about the "predatory behaviour" of existing firms, designed to exclude new entrants from the market. Which characteristic was likely to have been observed?

(1)

A Prices equal to marginal cost

B High prices in the short run

C Prices set above average costs in the short and long run

D Revenue maximisation pricing

E Prices set below average variable costs in the short run

Answer ☐

Explanation

(3)

(Total for Question 6 = 4 marks)

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7 Game theory can be used to explain the breakdown of a cartel. Which of the following is the most likely cause of such a breakdown?

(1)

A A possibility of an individual member gaining short term profits

B An aim of reaching long term equilibrium

C Economies of scale

D Satisficing behaviour

E Reduced risk of collusive behaviour being investigated

Answer ☐

Explanation

(3)

(Total for Question 7 = 4 marks)

8 In 2009 a 30-year private finance contract for widening and maintaining the M25 motorway was agreed. The contract was valued at £6.2 billion, with penalties if the consortium of companies did not achieve completion on time.

The main reason that the government used a private finance contract was likely to be because it:

(1)

A wanted to manage the project within the public sector

B cannot use performance targets in the public sector

C has limited experience of road building

D wanted to increase producer surplus

E wanted to commence a major project without raising the finance at the initial stage

Answer ☐

Explanation

(3)

(Total for Question 8 = 4 marks)

TOTAL FOR SECTION A = 32 MARKS

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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 Food manufacturing and retailing

Extract 1 Northern Foods struggles to meet supermarket power

Food manufacturing is a brutal industry. A fresh burst of commodity inflation has raised input costs and the buying power of the big supermarkets makes it hard for food manufacturing firms to pass these extra costs on. The grocers' influence is a benefit to consumers: though dominated by a handful of big chains, Britain's retailing industry is competitive, and the margins squeezed from manufacturers are shared with shoppers. That buyer power is not such a blessing for suppliers, who struggle to hold on to any cost savings they make. Multinational firms, such as Nestlé or Unilever, possess the strength and the famous brands to fight back. Small suppliers seem powerless.

Northern Foods isn't small (it has almost 9,500 employees) and owns some sizeable brands, such as Fox's Biscuits; but the core of its business is supplying prepared foods to which supermarkets then attach their own labels. The firm led the way in chilled prepared meals, partnering with Marks & Spencer (M&S) in the 1980s. But as others caught up, Northern Foods found itself struggling against retailers who could quickly change suppliers if they wanted to pay less.

Northern Foods' response to its declining fortunes and slumping share price was to seek a merger. In November 2010 there was a proposed merger with Greencore, a Dublin-based food manufacturer. It would have yielded the merged company £40m a year, around 2% of joint sales, through cost and tax savings, and better terms with its own suppliers. Behind the push for a merger was a belief that a bigger, more diversified firm would not be so easily bullied by retailers.

Yet it is far from clear that Northern Foods' main problem is insufficient scale. Other food manufacturers have thrived despite pressures on profit margins. Cranswick, a supplier of upmarket pork products to supermarkets, has a bigger stockmarket value than Northern Foods' with less than half the staff. Its revenues and share price have grown quickly in the past decade, as have those of Kerry Group, an Irish firm supplying the upmarket City Kitchen line of prepared meals for Tesco. The firm works closely with retailers to provide good service and improved products and is very disciplined in controlling costs.

The key to a good bargaining position for food manufacturing firms, it seems, is to make it costly for retailers to change suppliers. The more reliable the supply, the better the goods and the more tailored the service, the harder it is for retailers to switch. This requires constant effort: a firm that stands still is a target for the cost-cutting chains.

(Source: adapted from © *The Economist* Newspaper, 10 February 2011)

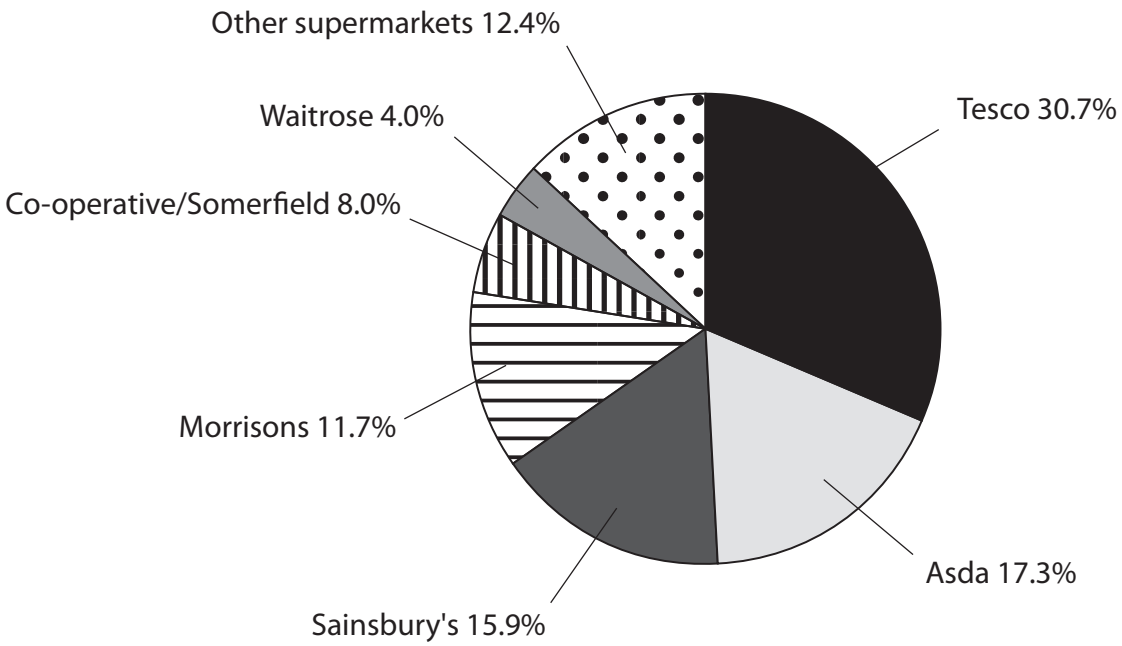
Extract 2 Tesco pushes into northern California

In 2007 Tesco began its move into the United States by opening a chain of small-format grocery stores on the West Coast of the United States (Arizona, California and Nevada) under the brand name Fresh & Easy. Tesco has now begun its expansion into northern California, with the opening of its first two stores in the San Francisco Bay area, indicating the continued expansion of its loss-making US venture under new group chief executive Philip Clarke. A further 10 standard stores are set to open by April 2011. Fresh & Easy, which has more than 160 stores, is to open about two stores a week this year. The initial planned capital expenditure was up to £250 million per year. One of the key decisions for Mr Clarke will be deciding whether to continue with the Fresh & Easy chain, which made a loss of £165m last year, but is expected to break even by 2013, and turn losses into profits by 2015.

Tesco is planning to extend Fresh & Easy into smaller sized stores with the aim of attracting customers from larger out of town stores owned by competitors. Opening the northern California stores demonstrates that Mr Clarke is pushing ahead with expansion, despite the highly unusual decision last October to close 13 loss-making stores, primarily in Arizona and Nevada. These states have been hit by the US housing market downturn, shrinking populations, the high percentage of house repossessions and high unemployment rates.

(Source: adapted from © The Financial Times Limited, 3 March 2011)

Figure 1 UK supermarket market shares by revenue, 2009



(Source: © Kantar Worldpanel)

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Extract 3 Tesco's purchase of 77 One Stop stores angers rivals

One Stop, a chain of 598 convenience stores in the UK, was bought by Tesco in 2002 as part of its £377m acquisition of T&S Stores. Tesco has been forced to defend itself against allegations of high prices – despite its general claims that its huge scale means consumers benefit from the retailer offering the same prices nationwide.
A spokesperson for Tesco said "The ranges are quite different in One Stop. It is a separate business with a different supply chain and a separate business model with stores that are typically smaller than those running under the Tesco Express name".
In clearing the original merger, the OFT said "Tesco has said that the transaction will bring consumer benefits as its Express store prices are lower than those of One Stop." There are currently 1,183 Tesco Express stores, and Tesco controls 3.5% of the convenience store market. Tesco is the world's third largest retailer by revenue, after Walmart and Carrefour, and the second largest after Walmart by profit.

(Source: adapted from © Guardian News & Media Ltd 2010 16 December 2010)

(a) Using the evidence, explain one potential benefit to Greencore of the proposed merger with Northern Foods (Extract 1 lines 17–21).

(4)

(b) Using an appropriate diagram, discuss **one** reason why new 'Fresh & Easy' stores set up in the United States are likely to 'turn losses into profits by 2015' (Extract 2 line 11).

(8)

*(c) Using examples from the Extracts, assess the degree of **monopsony** power in the groceries market.

(12)

*(d) With reference to supermarkets or another industry of your choice, assess reasons why some firms become very large and others remain small.

(16)

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(12)

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(16)

(Total for Question 9 = 40 marks)

If you answer Question 10 put a cross in this box ☒ .

10 A crowded car industry

Figure 1 US car market, % market share 2010

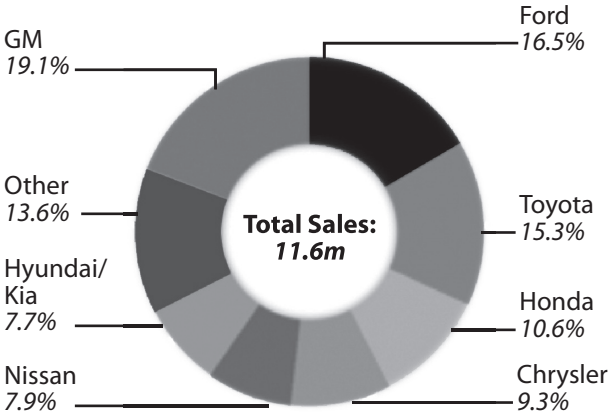
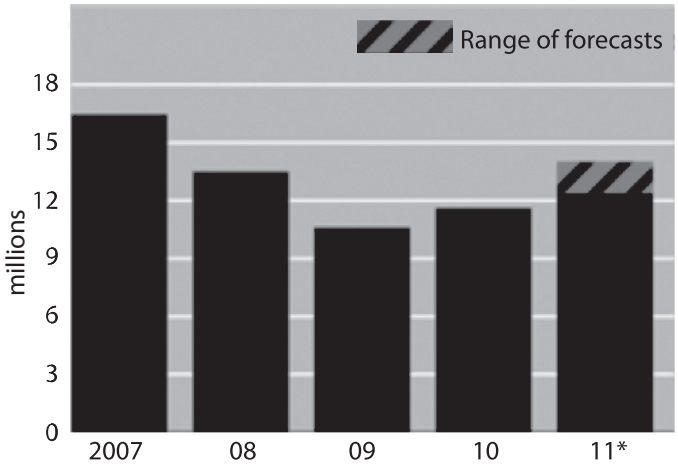


Figure 2 US car market, units sold (millions)



Extract 1 United States carmakers are back. Tough competition is waiting for them

Every year at the Detroit Motor Show there is a major display used by the main manufacturers of cars to bring new models to the US market. For the past two years it been a dismal affair, but this year the parties were in full swing again. Helped by government bail-outs and with debt burdens lightened by bankruptcy, Chrysler and General Motors (GM) are back on their feet. Ford, the other member of Detroit's Big Three, is thriving.

The biggest impact on the opening day was made by a Volkswagen saloon, which is to be built in a new factory in Tennessee. This is causing some concern for local manufacturers. Europe's market-leading carmaker is taking aim at the heart of the American market for the first time in over 20 years. Its bold move is just one sign of breakup in a market once dominated by the Big Three and a small collection of Japanese rivals.

The recession sent car sales in America falling from 16.5 million in 2007 to just over 10 million in 2009 (see Figure 2). Since then, sales have risen. Sales in December 2010 were equivalent to an annual rate of 12.7 million cars, the best performance since 2008, with a predicted 10% rise in 2011. Analysts point to an improvement in the creditworthiness of buyers which increases the willingness of banks to lend. Americans are buying big, expensive vehicles again.

The 2008 crash allowed Chrysler, GM and Ford to strengthen management and push through changes that had long been blocked by unions. Capacity was cut drastically: Ford closed 17 factories and reduced employee numbers by over 40%. GM abandoned brands such as Hummer and Saturn to focus on Chevrolet, Buick and Cadillac, while Ford got rid of all brands except Ford and Lincoln. Health care for company pensioners, for a long time a problem for the firms' owners, was transferred to union-run trusts. New workers can now be hired at lower rates of pay than those forced up by the United Auto Workers (Union) during the boom years. Ford's chief executive says his company can compete on price with factories opened in weakly

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unionised southern states by Japanese, South Korean and German carmakers. Ford may have made as much as $10 billion in profit last year.

For the Big Three now read the Magnificent Seven. Toyota, Honda and Nissan have been joined by Hyundai and its sister brand Kia in a fragmented market where seven manufacturers each have more than 5% of the market (see chart). And Volkswagen is trying to join the club. Volkswagen and its Audi offshoot sold 358,500 cars in the United States last year. The firm aims to triple sales by 2018 and plans to spend $3 billion on marketing and opening more dealerships.

Competition is particularly fierce in the "mid-range" market, where Toyota's Camry, Nissan's Altima and Honda's Accord have long dominated. Since petrol prices first rose above $3 a gallon in 2005 Detroit has been trying to reconquer the mid-range car market instead of relying on sales of expensive gas-guzzlers. Ford is bringing in slightly Americanised versions of saloon cars that have been successful in Europe, while GM plans to do the same with versions of its German-designed Opels. Chrysler will import Italian technology from Fiat as the ties between the two companies strengthen.

They will face an old adversary. Quality problems at Toyota led to $48.8m in government fines and a recall of 4 million vehicles in America alone. Toyota's embattled chief executive, Akio Toyoda, making his first visit to the Detroit show, admitted that the firm "did receive damage". But it would be foolish to underestimate the ability of the world's biggest carmaker to put its house in order: it still has the most efficient system for product development and manufacturing, even if it must focus for the moment on quality control. For the first time it is offering customers discounts to increase sales.

The Japanese firm could learn a good deal from Hyundai and Kia. The South Korean firms suffered from reputations for poor quality when they entered the American market and relied largely on bargain prices to sell their vehicles. Under pressure from consumer magazines they gradually improved their quality and have won recognition from critics and customers. That jump in quality, as well as heavy marketing, has turned them into serious competitors. A glimpse of the next challenger came from BYD, a Chinese car manufacturer, which showed off an innovative, compact battery-powered car.

(Source for Figures and Extract: © *The Economist* Newspaper, *The Economist*, 13 Jan 2011)

(a) With reference to Figure 1, briefly explain the market structure in the US car market.

(4)

(b) Using an appropriate diagram, discuss **one** reason why General Motors and Ford have been able to turn losses in 2008 to profits in 2010.

(8)

*(c) To what extent does the evidence suggest that the US car market is contestable?

(12)

*(d) Using evidence from a range of manufacturers referred to in Extract 1, assess pricing and non-pricing strategies car manufacturers might use to increase total revenue, when petrol prices are rising sharply.

(16)

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(Total for Question 10 = 40 marks)

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

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Mark Scheme (Results)

Summer 2012

GCE Economics (6EC03)
Paper 01

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General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

If an incorrect key has been chosen, the maximum score is 2 out of 4 **except on question 6.**

Incorrect options can be knocked out, if relevant economic reasoning is given. If more than one key is knocked out for the same reason this will earn one mark only. There must be different reasons for each knock out. Marks are **not** awarded if the rationale is that 'it's not A because it is B' – there must be some valid economic rationale.

Up to two knock out marks can be awarded for each supported choice question.

Question Number	Answer	Mark
1	**E** Horizontal integration or merger defined, e.g. merging of businesses at the same stage of a production process (1 mark) meaning that there are economies of scale and/or type economy of scale (1 mark) with other application to building maintenance e.g. use of capital equipment (1 mark), reasons for or benefits of integration, increased market share (1+1).	**(4)**

Question Number	Answer	Mark
2	**C** Definition or one characteristic of perfect competition (1) Diagram (up to 3 marks): **Short run**: AR=MR horizontal for firm and/or supernormal profits (1) **Long run**: AR=AC=MC=MR for firm normal profits and/or fall in output for firm (1) I**ndustry diagram**: showing supply shifting right showing fall in price (1) Equivalent verbal analysis: no barriers to entry mean that other firms will enter (1) supernormal profit acts as a signal or incentive (1) this will reduce price because of increased competition/total output in the market increases as industry supply increases (1) and each individual firm's output will fall (1) and firm will only make normal profit in the long run (1).	**(4)**

Question Number	Answer	Mark
3	**D** Vertical integration definition e.g. joining with a firm involved at a different stage of the **same** production process/same industry/same final product (1 mark). Role of Ofgem/regulator e.g. surrogate for competition/to promote competition/act in the consumers' or public interest (1). Explanation: that these firms can control or dominate suppliers or customers/outlets (1 mark) with application or consequence e.g. new firms cannot get onto distribution networks, or other barriers to entry (1 mark). Use of data, e.g. calculation of concentration ratio (1). Example of knockout mark: it is not E because EDF has 24% of the industry, but a legal monopoly is 25% or over (1)	**(4)**

Question Number	Answer	Mark
4	**A** Definition or formula for marginal cost (1 mark) Explanation of Law of Diminishing Returns: there is at least one fixed factor (1 mark) marginal costs rise as more factors are added/marginal product falls as more factors are added (1) Application to any context (1) e.g. too many rice pickers in a field cannot add much to total output Diagram (1) showing **gradient** of TC rising having been rising more slowly up to X. Example of a knockout mark: it is not E because economies of scale are a **long run** concept or drawing of long run average costs (1)	(4)

Question Number	Answer	Mark
5	**C** Definition of profit maximisation, e.g. MC=MR (1 mark) Calculation of Total Revenue (TR) column (1 mark) Calculation of Marginal Revenue (MR) column (1 mark) Calculation of Total Costs (TC) column (1 mark) Calculation of Total Profits column (1 mark) Firm is price maker, or downward sloping demand curve (1 mark) Application mark: MC=MR when they are both £6 Allow answers to be written between cells rather than in cells (technically correct, which makes output 2.5 profit max) (1 mark for correct inference of output 2.5 or 3)	**(4)**

Quantity	Price (£)	Total Revenue (TR)	Marginal revenue (MR)	Total costs (£)	Marginal costs (MC)	Total Profit (TR-TC)
0	11	0	-	5	-	-5
1	10	10	10	9	4	1
2	9	18	8	14	5	4
3	8	24	6	20	6	4
4	7	28	4	28	8	0
5	6	30	2	38	10	-8

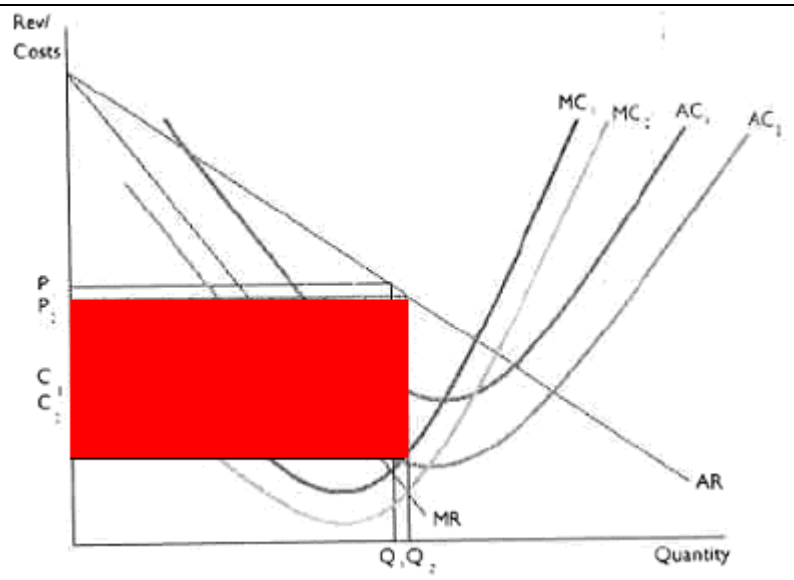
Question Number	Answer	Mark
6	**E** Definition or formula of AC or AVC (1) costs per unit, or variable costs per unit Explanation of predatory pricing e.g. **losses made in short run** to remove competitors or deter new entry (1 mark). Role of OFT/regulator (1) Diagram (1): AR<AVC or AR<AC with loss shown Shut down point: if firms cannot cover AVC they must stop production in the short run (except predator) (1) because they are not making a **contribution** to fixed costs (1) Illegal (1) Application in the context of bus services (1) Role of fines (1) e.g. as a deterrent Other long run implications, that prices will rise, choice will be reduced, profits will be increased (1) Allow **up to 3 marks for the explanation** of wrong answers A and D, where candidate has read the question as a **limit pricing** question, i.e. simply to deter new entrants rather than to force other firms out. In these cases do not award the mark for the key but allow definition of allocative efficiency (if A is chosen) or revenue maximisation (if D is chosen)	**(4)**

Question Number	Answer	Mark
7	**A** Definition of cartel (1) e.g. a system of collaboration/collusion/agreement between firms, or, when individual firms act as a single firm in decision making Firms are operating in an oligopoly/interdependent (1) Correct application of payoff matrix showing short term profits for breaking collusion (1) Verbal analysis, for example using the explanation of the prisoners' dilemma, which may be illustrated by the payoff matrix (up to 3 marks): • show that collusion maximises joint profits/revenues (1) • incentive to **undercut** rival, e.g. if there is scope for gaining short term winnings at the expense of the other firm or firms (1). • long term equilibrium where both firms are worse off than if colluding (1) • incentive to form a new cartel (1) • price war might follow, other firm will copy (1) • other second round effects, e.g. breaking a collusive agreement can ruin the chance of future deals (1) Application or example (1) e.g. a country in OPEC might increase output against the agreement Illegal (1)	**(4)**

Question Number	Answer	Mark
8	**E** Explanation of private finance initiative (PFI) or public private partnership (PPP) e.g. meaning that private firms supply major projects (1) that are then rented or leased to the government (1) **Profit motive/competition may change behaviour**, e.g. the private firm keeps the profits, or they are more efficient in reaching targets than public sector (1) Wider scope of projects because it means that projects that might not have been achievable are more likely to happen, e.g. taxes do not have to rise, there is a budget deficit, national debt(1) Reference to current sovereign debt crises and austerity measures, or other application to current context (1) Higher cost involved than if paid for up front (1) Function of penalties, e.g. if work is not finished in time (1) Allow knockout of B: there are performance targets in the public sector, ***if backed up*** with an example (teacher appraisals and NHS waiting list targets) or further explanation of how a performance target can improve efficiencies (1)	**(4)**

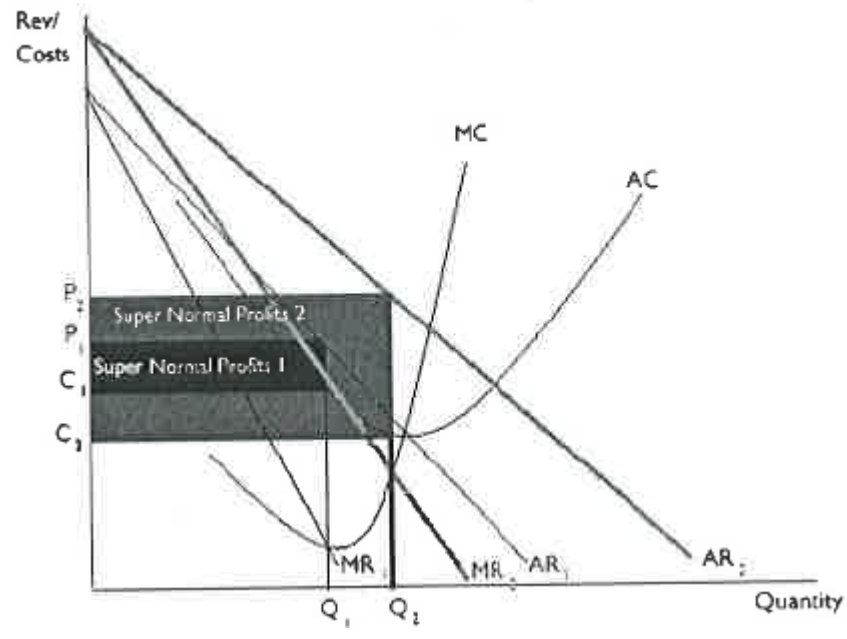
Question Number	Answer	Mark
9(a)	**2 theory + 2 application** 2 marks for **one** benefit: Identification of a likely benefit, e.g. economies of scale, increased market share/combat supermarkets' monopsony power/gaining own market power/gain own monopsony power (1 mark) with explanation of why this was a benefit, e.g. bulk buying (1 mark) 2 marks for application: Use of Figure 1 to show the benefit of merger in context of high concentration ratios of supermarkets (this explains their monopsony power) (1) better terms with own suppliers (1) or better deals in supplying supermarkets (1) example of bulk applying e.g. sugar (1) cost and tax savings (1), £40 million cost saving/profit rise or 2% worth-of-joint-sales of cost reduction/profit rise (1), less bullying of retailers (1)	**(4)**

Question Number	Answer	Mark
9(b)	**1 knowledge + 1 application + 2 analysis (diagram) =4 KAA** **4 KAA + 4 Eval = 8** KAA 4 marks: Demand will rise e.g. by attracting customers from larger out-of-town stores(1 +1); **or** costs will fall because loss making stores are being closed (1 +1) Diagram (2 marks) of which showing shift outwards in AR and MR OR fall in costs AC and MC or if just a fall in fixed costs, just AC (1 mark) and new profit area (1 mark)	



Allow MC shift if clear it is not fixed costs only that will change, e.g. reference to change in number of employees in stores
Allow no MC shift if clear that fixed costs are bring considered, e.g. reference to closing stores
Allow LRAC/long run efficiency increases as 1 diagram mark (fall in costs).

OR



Evaluation (4 marks) Award 2 + 2 or 3 + 1 or 4 + 0.
Points might include:

- Reasons why the projection might be overoptimistic
- Stores have recently been closed showing that the profit is not certain

(8)

	• Comment on the magnitude of profitability • Comment on which factors might be more important, e.g. economies of scale • Consideration of changing elasticities, e.g. consumers are more likely to buy inferior goods in a recession • depends on the size of shift, • whether the demand change is short lived, • There might be other factors shifting demand and supply. • Difficult to tell from information provided, it might be just the recession, • there might be other motives, e.g. increasing brand loyalty	

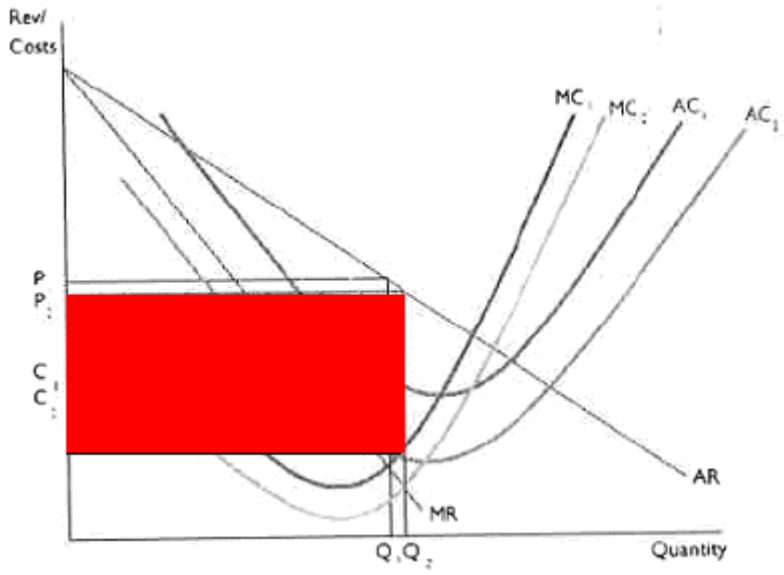
Question Number	Answer	Mark
9(c)*	**6KAA + 6 eval** KAA 6 marks Award up to three applied arguments as 2 + 2 + 2 or 3 + 3 Definition of monopsony as **powerful** or **sole** buyer, or a few dominating buyers (1 mark) • supermarkets forcing down Northern Foods' • handful of large chains, suggesting high level of concentration in buying market e.g. 6 firm concentration ratio is 87.6%. Although the data is for monopoly/oligopoly selling power, there are implications for buying power • degree of monopsony power maybe seen in lower prices and more choice for consumers in short run • retailers quickly change suppliers (for own-label) if they want to Evaluation 6 marks. These may be arguments that monopsony power is weak if the KAA arguments are for strong monopsony power, and vice versa. Award up to three arguments as 2 + 2 + 2 or 3 + 3 Factors might include: • some suppliers such as Nestle and Unilever ave bilateral/counter-balancing/counterveiling power • monopsony might attract the attention of	#

	the regulators • Cranswick or Kerry have not suffered, because they have adapted • there are other reasons why profits are low, e.g. x inefficiency • long run consequences of a high level of monopsony power, e.g. less choice for consumers and higher prices than might otherwise have been weighed against short term benefits • the merger of Northern Foods and Greencore would reduce monopsony power • the last paragraph of Extract 1 implies that manufacturers can make it costly/difficult for retailers to change suppliers by changing products/services offered • Lower degree of monopsony pwer in sub-markets such as convenience stores (e.g. 3.5% Tesco market share) and isa 'separate business with a different supply chain' (Ext 3) (3 x 2marks or 2 x 3 marks)	**(12)**

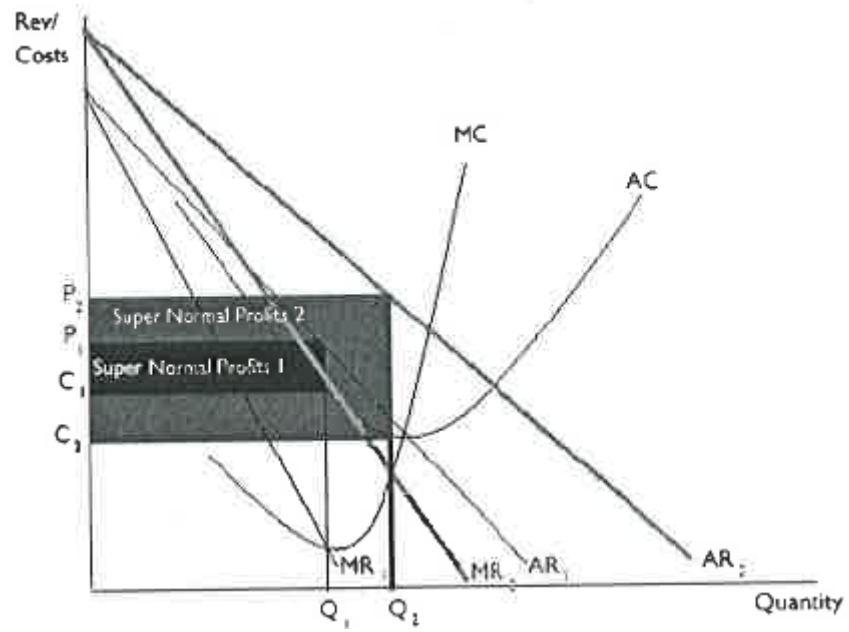
Question Number	Answer	Mark
9(d)*	**8 KAA + 8 evaluation =16** KAA 8 marks. Award the best four points made, or fewer. 4 x 2 marks, 2 x 4 marks, or 3 + 2 + 2 + 1 marks For each point 1 mark identification, 1 mark application, 1+1 marks for analysis Reasons for growth of some firms might include: • Economies of scale (can count as more than one factor) and minimum efficient scale, e.g. bulk buying/monopsony power • Aim to increase market power/ market share/ monopsony power e.g. firms can remain large because of oligopoly power (can count as more than one factor) • Rationalisation in larger firms keeps costs down, so is a motive to grwo • Patents, copyright and other barriers to entry • Successful growth strategies, e.g. sales max, output max, predatory pricing, limit pricing • Risk taking is successful • Diversification e.g. entry into niche markets in US with Fresh & Easy • Control of resources • Opportunities to integrate/M&As • Global trade issues, such as trading blocs	

	• Motives of directors e.g. satisficing shareholders while aiming for growth for other motives such as prestige or sales-performance related pay; aim of increasing profits **If no application to any industry, cap at 6/8 KAA marks** **KAA can be awarded for saying why firms are large and evaluation for why some remain small, and vice versa.** **Evaluation 8 marks.** Can allow reasons why firms do not want to grow or remain small (counterargument to the above) or other forms of evaluation Award the best four points made, or fewer. 4 x 2 marks, 2 x 4 marks, or 3 + 2 + 2 + 1 marks Reasons firms remain small might include (must apply to specific industry): • Niche markets, specialist markets, small market size • Lack of finance and/or retained profits e.g. depends on the degree of lending to small and medium size businesses (allow reference to Project Merlin 2011) (may count as two points) • Different objectives of firms, eg cooperatives, satisficing behaviour of firms, avoid risk, family firm • Parts of processes might be contracted out, leaving smaller core business • Need for personalised service/after care • Tax breaks, VAT thresholds and other government incentives for small firms • Dynamism of small firms • Diseconomies of scale, very low minimum efficient scale, or lack of significant scale economies (may count as more than one factor) • External economies may exist • Nature of the business, e.g. hairdressing • Nature of the market, e.g. monopolistic competition, monopsony power • It may be a matter of time before the smaller firms are swallowed up • Depends on the state of the economic cycle • Firms might stay small to avoid the attention of the competition authorities • Ignorance, or other managerial failure • Firms might stay small to avoid the attention of other firms, e.g. to avoid takeover, predatory behaviour by other firms, limit pricing by other firms. You may award use of game theory in developing such answers.	**(16)**

Question Number	Answer	Mark
10(a)	**2 theory + 2 application** Knowledge (2 marks): Oligopoly (1 mark) where a few firms dominate the market (1 mark) Use of data (2 marks), with at least one mark for use of Figure 1. e.g. calculation of concentration ratio e.g. the 2-firm CR (1) is 35.6% (1) (1 + 1); referring to the 'Big Three' or 'Magnificent 7' Extract 1 (1).	**(4)**

Question Number	Answer	Mark
10(b)	KAA 4 marks: Demand rose (1) with application e.g. 10% rise, as creditworthiness improves, willingness of banks to lend(1 +1); **or** costs fell (1) with application e.g. narrower range, factories closed, employee numbers reduced (1 +1) Diagram (2 marks) of which showing shift outwards in AR and MR OR fall in costs AC and MC or if just a fall in fixed costs, just AC (1) and new profit area (1)  Allow MC shift if clear it is not fixed costs only that will change, e.g. reference to change in number of employees Allow no MC shift if clear that fixed costs are bring considered, e.g. reference to closing 17 factories, salaries not being paid. Allow LRAC/long run efficiency increases as 1 diagram mark (fall in costs).	

OR



Evaluation (4 marks) Award 2 + 2 or 3 + 1 or 4 + 0
Points might include:

- Reasons why the projection might be overoptimistic
- Comment on the magnitude of profitability or revenue/cost changes e.g. Figure 2 shows sales have not yet reached 2007 levels
- Comment on which factors might be more important, e.g. economies of scale
- Consideration of changing elasticities, e.g. consumers are more likely to buy inferior goods in a recession
- depends on the size of shift, they might be cancelled out by changes in costs if demand has been considered, or be magnified when costs and demand are considered together
- whether the demand change is short lived,
- There might be other factors shifting demand and supply.
- Difficult to tell from information provided, it might be just the recession, there might be other motives, e.g. increasing brand loyalty
- Magnitude, eg costs of labour are a very significant element, redundancy payments are high, 17 firms closed, might arouse the suspicion of the regulators if very high
- Improved credit-worthiness/easier bank lending does not necessarily mean that people want to borrow more
- Profits might disappear as Chinese BYD and other competitors enter the market

(8)

Question Number	Answer	Mark
10(c)*	**6 KAA + 6 evaluation** KAA up to 6 marks for arguing either for or against the argument that the market is contestable. Definition of contestability (low or no sunk costs, or low or no barriers to entry/exit) (1) KAA the market **is** contestable (may be argued that it is not contestable): Award up to three arguments as 2 + 2 + 2 or 3 + 3 with and evidence. Factors might include: • Volkswagen's new saloon made the biggest impact on the opening day at Detroit, 'causing some concern for local manufacturers' • Evidence of fragmenting market (eg Magnificent Seven) as ease of possible entry into the market • Focus on low energy/battery powered cars could create a new **niche** for entrants, eg Chinese BYD • New firms have been able to set up easily, with examples from South Korea and China, • Other firms have left the market implying low barriers to exit • The names of the some new entrants are already well established, so it easier for these firms to enter a market. Evaluation 6 marks (either **for** or **against** high contestability) Award up to three arguments as 2 + 2 + 2 or 3 + 3 Factors that the market is **not** contestable might include: • The 2008 crash allowed Chrysler, GM and Ford to cut costs and increase efficiency – meaning that it will be harder for new entrants to compete with the now leaner incumbents • there are high sunk costs, such as gaining a place on the Detroit platform, R&D • firms find it difficult to enter, and the ones that have entered have economies of scale in other markets, funds e.g. $3bn to spend on marketing, Audi and Volkswagen have new dealerships, can cross subsidise • Toyota 'still has the most efficient system for product development and manufacturing' implying that large	

	scale investment would be required of any new entrant to compete on average costs. • Limited evidence that the new entrants will survive. • Incumbents may have access to better production techniques or other asymmetric information problems • Supernormal profits are evidence of low contestability • National identity is important in the car industry, especially as a large proportion of income is spent (low PED)	**(12)**

Question Number	Answer	Mark
10(d)*	**8 KAA + 8 evaluation** KAA 6 marks + 2 for petrol cost reference. This could be data reference line 38, or gas-guzzlers line 39 as attempt to reduce the amount of petrol used. Reference to battery powered car line 58-59 or hybrids may also be implicitly used, falling spending power after petrol costs and income elasticity arguments based on increased price of petrol. Mark breakdown: award best **four** points up to four marks each, with cap of 6 for KAA excluding petrol costs: e.g. 2+2+2, or 3+3 or 3+ 2+1 or 2+2+1+1 etc. There must be at least 1 pricing and 1 non-pricing policy. If one type is omitted then cap KAA 4/6 marks Strategies must be aimed at increasing sales **revenue**, at least in the long run Pricing strategies might include: • Predatory pricing (must be linked to long run revenues), • limit pricing (must be linked to long run revenues), • profit maximisation (assuming the firm was not profit maximising and was operating at a lower revenue), • sales/output maximisation, • revenue maximisation, • price discrimination • collusion, can be used as pricing or non-pricing strategy Award development using discussion of PED. Non-pricing strategies might include: • improving quality (reference to Toyota), • trade exhibitions (Detroit Motor show 'parties in full swing') • advertising, • narrowing brands,	

	• loyalty deals, • mergers and acquisitions, • collusion, can be used as pricing or non-pricing strategy • use of patents, • change in branding to 'modest' cars from 'gas guzzlers' Award use of game theory to explain the process, e.g. collude then cheat **Reserve 2 KAA marks for application that rising petrol prices is dampening demand for cars** Evaluation 8 marks. Award the best **four** points made, or fewer. 4 x 2 marks, 2 x 4 marks, or 3 + 2 + 2 + 1 marks Reasons might include: • why strategies might not increase revenues in the short or long run, e.g. price war. Award use of payoff matrix/kinked demand to show revenues fall • action of the competition authorities, e.g. fines or imprisonment, • game theory as a critique, e.g. it depends on the action by other firms • discussion of PEDs in context of falling real incomes, after petrol price rises • Discussion of degree of cross elasticity between cars and petrol, or degree of inelasticity of demand for cars, e.g. there is no viable alternative Award use of game theory as evaluation, e.g. kinked demand curve shows that changing price does not raise revenue, or a payoff matrix to show that revenue does not rise in the long run if all firms follow the same strategy	**(16)**

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Edexcel GCE

Centre Number	Candidate Number

Economics

Advanced

Unit 3: Business Economics and Economic Efficiency

Monday 23 January 2012 – 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** 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.

Turn over ▶

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P 4 0 0 9 3 A 0 1 3 2

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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 In August 2009 the Competition Commission published a Groceries Supply Code of Practice. Large supermarket chains were paying very low prices to some suppliers. Which type of market power does this suggest the large supermarket chains have?

(1)

A Monopsony

B Monopolistic competitive

C Perfectly competitive

D Natural monopoly

E Competitive monopoly

Answer ☐

Explanation

(3)

(Total for Question 1 = 4 marks)

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2 General Motors made a loss of $4.3billion in 2009. Under which one of the following conditions are firms such as this likely to keep operating?

(1)

A The market is highly contestable

B They are covering average variable costs in the short run

C Total revenue is less than total cost in the long run

D They are covering marginal costs in the short run

E There are low sunk costs in the industry

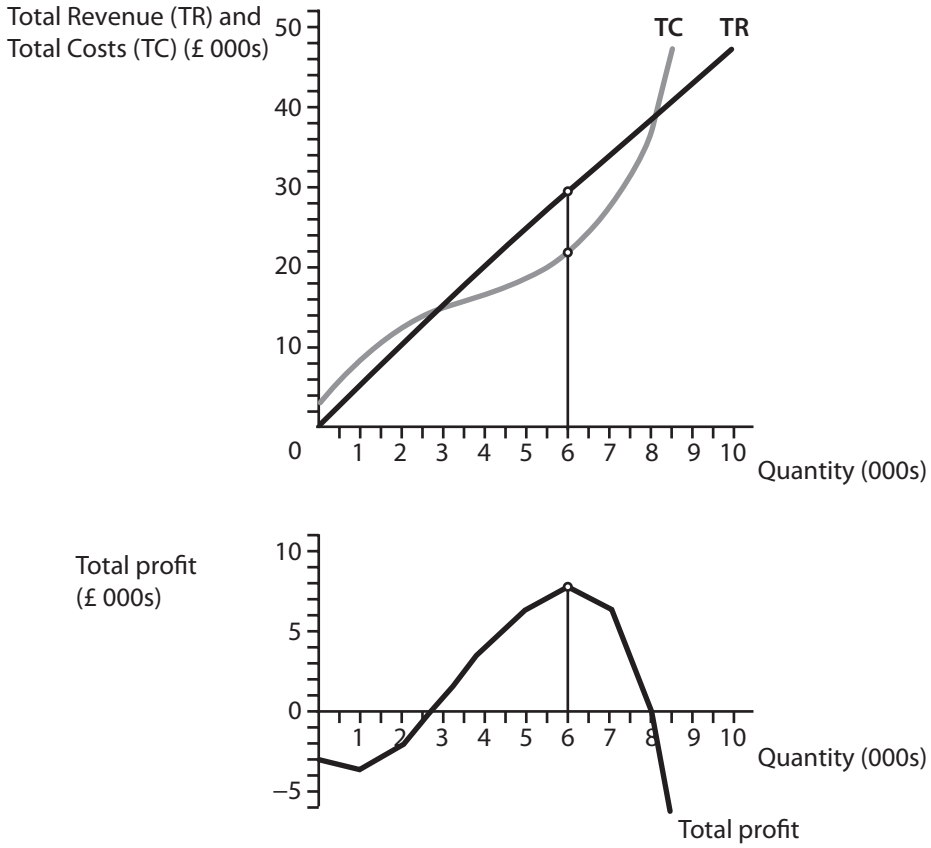
Answer ☐

Explanation

(3)

(Total for Question 2 = 4 marks)

3



The diagrams show the costs, revenue and profit for a profit maximising firm.
What can be inferred from these diagrams?

(1)

A The firm operates in a perfectly competitive market in the short run

B The firm will produce at a quantity of 6,000 units in the long run

C There are barriers to entry and exit

D The firm will produce at **any** output between 2,650 and 8,000 units

E The firm is making a loss

Answer ☐

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Explanation

(3)

(Total for Question 3 = 4 marks)

4 The following matrix shows the possible revenue outcomes of two firms tendering building services to the government. Assuming Hanna Ltd and Jax Ltd have agreed a pricing strategy that will give each a revenue of £1000, what change in pricing strategy would increase the revenue for Hanna Ltd?

(1)

		Hanna Ltd	
		High price	Low price
Jax Ltd	High price	£1000 £1000	£1200 £600
	Low price	£600 £1200	£800 £800

A Both firms set a high price

B Hanna Ltd sets a high price and Jax Ltd sets a low price

C Jax Ltd sets a high price and Hanna Ltd sets a low price

D Both firms set a low price

E The firms engage in tacit collusion

Answer ☐

Explanation

(3)

(Total for Question 4 = 4 marks)

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5 In November 2010, the Indian poultry and pharmaceutical company Venky's bought Blackburn Rovers Football Club in the UK for £23 million. One likely motive for this takeover was to benefit from

(1)

A technical economies of scale

B diversification

C price discrimination

D forward vertical integration

E increased market share

Answer ☐

Explanation

(3)

(Total for Question 5 = 4 marks)

6 A firm selling snack food at a music festival is operating in market conditions of monopolistic competition. It is likely to be

(1)

A allocatively efficient in the short run and productively efficient in the long run

B allocatively efficient in the long run and productively efficient in the long run

C both allocatively and productively efficient in the long run

D neither allocatively nor productively efficient in the long run

E both allocatively and productively efficient in the short run

Answer ☐

Explanation

(3)

(Total for Question 6 = 4 marks)

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7 The price of cotton, a major cost component in the clothing sold by retailers Next, Primark and Debenhams, is predicted to rise significantly. What will be the effect on these firms, if other factors remain constant?

(1)

	Output	Profits
A	Rise	Rise
B	Constant	Constant
C	Fall	Fall
D	Constant	Fall
E	Fall	Constant

Answer ☐

Explanation

(3)

(Total for Question 7 = 4 marks)

8 A large number of small bakeries in a competitive industry are taken over and combined to form a single monopoly supplier. Assuming **constant average costs**, what effect will this have on price and output?

(1)

	Price	Output
A	fall	fall
B	no change	no change
C	rise	rise
D	no change	fall
E	rise	fall

Answer ☐

Explanation

(3)

(Total for Question 8 = 4 marks)

TOTAL FOR SECTION A = 32 MARKS

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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 The UK Banking Sector

Extract 1 RBS fined £28 million for sharing price data

Royal Bank of Scotland (RBS) was fined £28.6 million in March 2010 for breaking competition law in the first big case brought against a financial services company, and one of the largest against a company for anti-competitive behaviour. RBS admitted that staff involved in making loans to big law and accounting firms had illegally given pricing data to corresponding staff at Barclays. Barclays had used the information provided by RBS to determine the pricing on its own loans before it reported the lawbreaking to the authorities in 2008. RBS had provided Barclays with broad information about the loan market, as well as specific details of the proposed pricing structure for two new loan facilities. These disclosures took place at a number of social, client and industry events and through telephone conversations between October 2007 and March 2008.

The breach in competition laws occurred before RBS was bailed out by the government, and it is now 70% owned by taxpayers. RBS said yesterday that it was a "deeply regrettable and isolated case".

No action is to be taken against Barclays, as a reward for having acted as an informant within the industry, voluntarily disclosing its part in the affair to the competition authorities.

(Source: © The Financial Times Limited 2010, adapted from 'RBS fined £28 million for price sharing data', by Michael Peel and Sharlene Goff)

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Extract 2 Fresh bonus fears as bank profits rise

The UK's five biggest banks – HSBC, Barclays, Lloyds Banking Group, Royal Bank of Scotland and Standard Chartered – have revealed that they made combined profits of £8.4bn in the first half of 2010. This performance is likely to be taken as proof that UK banks have recovered from the credit crisis and benefited from staffing reductions. However, there are concerns that these higher profits will lead to executives claiming greatly increased pay packages. The banks' share prices have jumped this year – RBS is up more than 70%, Lloyds is up nearly 37% – which could trigger the end-of-year bonuses to senior banking staff. Barclays is expected to disclose a bonus-to-salary ratio in line with the 38% paid last year – the highest of the UK banks.

Under pressure from the Bank of England and the Financial Services Authority, banks last year cut dividends and reduced bonuses as a proportion of revenue. The Chancellor said "we will not tolerate banks piling the pressure on the small to medium-sized business sector. The banks have an economic obligation to assist that sector. Every small and medium-sized company that I have visited in recent weeks has had some problem with their bank – either they have found it difficult to renew their overdraft or the bank demanded additional collateral, often someone's house. The danger is, particularly next year when there is a huge amount of refinancing required, that small and medium-sized businesses will suffer from a lack of access to short term loans."

(Source: © copyright Telegraph Media Group Limited, 31st July 2010)

Extract 3 Other views on bank bonuses

The Deputy Prime Minister, Nick Clegg, said last week that the Government will "not stand idly by" if bonuses are too high. This needs to be more than just words. Ministers need to prevent the payouts being made, or at the very least ensure that awards are made entirely in shares (which will have the effect of increasing the capital reserves of banks), rather than cash. And those banks that still insist on resisting ministerial pressure must face a further tax as punishment.

(Source: © *Independent*, www.independent.co.uk/opinion/leading-articles/leading-article-time-for-ministers-to-call-the-banks-bluff-2165552.html, 21st December 2010)

(a) With reference to Extract 1, what is meant by *anti-competitive behaviour* (Extract 1 line 3)?

(4)

(b) Using an appropriate cost and revenue diagram, assess **one** likely reason why banks' profits rose in the UK in 2010 (Extract 2 paragraph 1).

(8)

*(c) Assess the likely impact on economic efficiency in the UK banking industry of increased regulation of UK banks.

(12)

*(d) With reference to Extract 1, assess reasons for Barclays' changing behaviour. Refer to game theory in your answer.

(16)

(a) With reference to Extract 1, what is meant by *anti-competitive behaviour* (Extract 1 line 3)?

(4)

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(8)

*(c) Assess the likely impact on economic efficiency in the UK banking industry of increased regulation of UK banks.

(12)

*(d) With reference to Extract 1, assess reasons for Barclays' changing behaviour. Refer to game theory in your answer.

(16)

(Total for Question 9 = 40 marks)

If you answer Question 10 put a cross in this box ☒ .

10 The global yogurt market

Extract 1 Yoplait, a French yogurt firm, has plenty of potential buyers

Five years ago the French Government was concerned over rumours that Danone, the world's biggest maker of yogurts, would be bought out by the US giant, PepsiCo. The French prime minister put Danone on a list of companies to be kept under French ownership. Now, however, Yoplait – the world's second-biggest yogurt firm – is on the market. PAI Partners, a French private-equity company, is selling 50% of the firm. The rest is held by Sodiaal, France's biggest dairy co-operative. Once again, bidders are interested.

Demand for yogurt is booming across the world. According to a recent study, it is the fastest-growing sector in the dairy industry. The Chinese have been converted to yogurt in part by the addition of small plastic spoons to pots. Even the United States of America is considered an emerging market when it comes to yogurt. The average French person eats 30kg of yogurt per year compared with only 10kg for Americans.

Although Yoplait is lagging behind Danone in almost all countries, the two are equally placed in America where Yoplait has had a business arrangement with General Mills for 30 years to sell their yogurts. This has been a great success, but General Mills and Yoplait are currently in disagreement over terms for the renewal of their agreement. Ken Powell, the chief executive of General Mills, does not appear keen to take control of Yoplait, but this could change if Yoplait were to move to dissolve the relationship.

The most likely buyer is Lactalis, a French firm that could take over Yoplait in partnership with Nestlé. It put in a $1.76 billion bid for the whole company in November 2010. Other possible buyers include Unilever, a big Anglo-Dutch firm, and America's Kraft. A bid by PepsiCo cannot be ruled out. The maker of fizzy drinks and crisps wants to expand the healthier end of its range. Yoplait would be a perfect fit—as Danone would have been a few years ago.

(Source: adapted from *The Economist Newspaper* 20 November 2010)

Extract 2 Product launch of *Yoplait Greek* yogurt

How do you launch a new product in the $3.7 billion yogurt industry? That's a question that Yoplait recently tackled with the launch of *Yoplait Greek* in March 2010. Greek yogurt is yogurt that has been strained to remove the whey to make it thicker. The market for Greek-style yogurt already has several competitors including *Fage* and *Chobani*. However, *Yoplait Greek* managed to attract 90,000 customers to its website in its first month. This is more than three times the number of visitors to the next largest Greek-style yogurt website. See Figure 1.

Yoplait Greek used a combination of online display and search engine marketing to raise awareness of the product and attract consumers to its website. Display advertisements were placed on social networking sites such as *Yahoo* and *Facebook* to generate awareness. *Yoplait Greek* also had top sponsored search ranking on keywords "yogurt" and "Greek yogurt". The offer to download a coupon was featured prominently on every page on the site. Of the consumers who visited YoplaitGreek.com in March, 45% downloaded a coupon.

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Figure 1
Number of visits to Greek-style Yogurt websites, January to March 2010

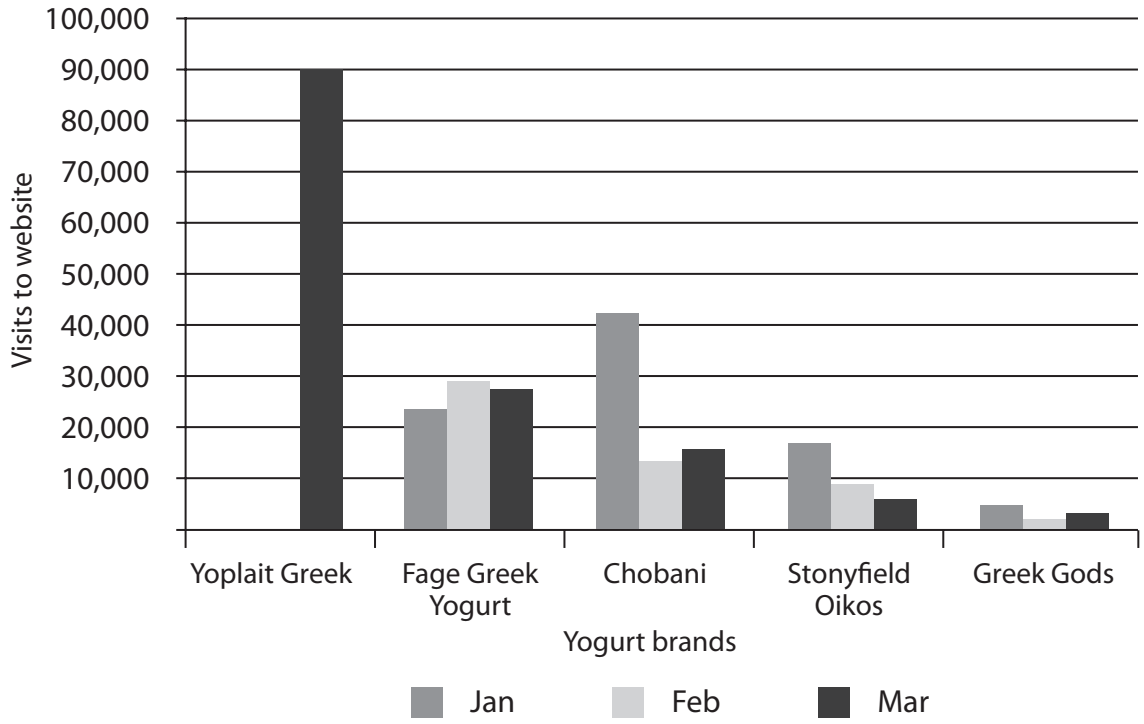
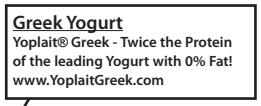


Figure 2
Website visitors to YoplaitGreek.com, March 2010



23,000 visitors from **Display ads** (≈26% of site traffic)



5,000 visitors from **Sponsored search** (≈6% of site traffic)



YoplaitGreek.com
90,000 visitors in March

(Source for Extract 2 & Figures 1 & 2: http://blog.compete.com/2010/05/03/using-the-online-channel-for-cpg-product-launch-yoplait-greek/)

(a) Using the information provided, explain the market structure in the supply of yogurt.

(4)

(b) Discuss **two** reasons why the French government may intervene to prevent the acquisition of Yoplait by an overseas firm.

(8)

*(c) Assume Yoplait is taken over by PepsiCo. Assess the possible benefits to PepsiCo **and** consumers of this acquisition.

(12)

*(d) With reference to Extract 2, discuss how the launch of the new product *Yoplait Greek* yogurt may influence the behaviour of rival firms.

(16)

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(16)

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(Total for Question 10 = 40 marks)

TOTAL FOR SECTION B = 40 MARKS

TOTAL FOR PAPER = 72 MARKS

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Mark Scheme (Results)

January 2012

GCE Economics (6EC03)
Paper 01

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General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

If an incorrect key has been chosen, the maximum score is 2 out of 4.
Incorrect options can be knocked out, if relevant economic reasoning is given. If more than one key is knocked out for the same reason this will earn one mark only. There must be different reasons for each knock out. Marks are **not** awarded if the rational is that 'it's not A because it is B' – there must be some valid economic rationale.
Up to two knock out marks can be awarded for each supported choice question.

Question Number	Answer	Mark
1	**A** Definition of monopsony, e.g. single or powerful buyer, (1) **role** of competition authorities (1), with application to buying of grocery supplies e.g. short shelf life of perishable products, or other supermarket products (1), supplying firms cannot make a profit (1) and explanation of market power, e.g. push down prices, exploitation of suppliers (1). Allow purchasing economies of scale (1). Consequences of monopsony power e.g. passing on lower prices to consumers, farms go out of business, greater profits to supermarkets (1+1) and results of the Commission's findings (1)	**(4)**

Question Number	Answer	Mark
2	**B** Definition or formula of AVC (1) AR>AVC or P>AVC (1) Loss minimisation (1) A business will leave the industry when it is not covering the operating costs/factors which do not have to be paid if there is no output, i.e. shut down point is AR=AVC, or similar definition (1). If it can exceed these costs it makes a contribution to fixed costs/reduces the overall costs that must be paid (up to 2 marks). In the long run it will cover all costs or shut down, or 'in the long run all costs are variable' (1 mark) application to motor industry, e.g. strong brand name is exit barrier (1 mark) Diagram up to (2 marks): 1 mark for showing shut down point, 1 mark for price/AR below AC or ATC (1) loss area (1) and/or contribution area (1)	**(4)**

Question Number	Answer	Mark
3	**A** Identification MC=MR Characteristic of perfect competition (1) Data mark: Supernormal profits (SNP) are being made/SNP is £7000 to £8000 in the short run, or profits are maximised at 6 units in the short run. (1) Annotation of diagram in the question which adds to the answer (1) Firm is a price taker/perfectly elastic demand (1) TR has a constant gradient/linear (1) Diagram showing horizontal AR/MR (1) showing SNP (1) In the long run the supernormal profits will be eroded (1) Normal profits in the long run (1). Knock out mark example: it is not E because the firm is making a profit (1)	**(4)**

Question Number	Answer	Mark
4	**C** Definition of collusion, e.g. collaboration, secret agreement (1) Identification of oligopoly/as in identification of top left box/interdependence/duopoly/prisoner's dilemma (1) Hanna Ltd undercuts Jax (1) Annotation of top right box to illustrate the answer (1) making short term gain, e.g. market share rises for Hanna (1) Hanna's revenue rises to £1200 or by £200(1). will probably lead to retaliation/Jax will cut price (1) where both end at £800 (this may be illustrated using kinked demand analysis, but this is not required) (1) Firms are better off colluding (1) Collusion is illegal/anticompetitive/leads to fines (1) Bottom right hand box is dominant strategy (allow Nash equilibrium) (1) illustrating price war (1)	**(4)**

Question Number	Answer	Mark
5	**B** Definition of diversification, e.g. widening of product range outside current areas of specialism (1) explanation of conglomerate merger (1) application, e.g. that there is little crossover between poultry and football (1). Motives for takeover (1+1): Risks are spread through diversification (1) and when one industry faces difficult times another can cross subsidise (1) risk-bearing economies of scale (1) prestige for new owners of the football club (1) entering a new geographical market (1) Possible disadvantages of decision (1)	**(4)**

Question Number	Answer	Mark
6	**D** Definition/characteristic of monopolistic competition, e.g. slightly differentiated products. (1) Explanation of *lack of* both types in efficiency (not just definitions) e.g. ' the firm is not operating at lowest cost per unit' and 'the firm is not operating to maximise welfare'. Accept formulae demonstrating AR ≠ MC and AC ≠ MC(1 + 1) Application to snack food, e.g. very similar food types (1) low ability to create strong market allegiances (1) Diagram showing long run equilibrium positions (1) with reference on diagram to P=MC and/or Min AC not being achieved (1). Also credit short run diagram where this illustrates changes (2 marks)	**(4)**

Question Number	Answer	Mark
7	**C** Definition/identification of variable cost or AVC or formula (1) The firms are **inter**dependent (1) Diagram (up to 3 marks) showing rise in MC **and** AC (1) with new equilibrium price and quantity (1) and reduced profits (1), or equivalent verbal analysis (up to 3 marks), reason why output falls (1), reason why prices might rise, e.g. variable costs of production have risen (1) reason why profit falls, e.g. a smaller mark-up can be made, costs have risen (1)	**(4)**

Question Number	Answer	Mark
8	**E** Definition of monopoly or market power (1) Explanation that the horizontal integration increases market power (1) Diagram (up to 3 marks) showing constant AC and MC (1) with new equilibrium at new MR = MC (1) showing higher price on diagram (1) and lower output (1) loss of consumer surplus (1). Also award diagrams showing movement from monopolistic competition to monopoly where this clearly distinguishing the firm and industry. Or equivalent verbal analysis: Monopolisation/dominance would be reasons for raised price (1) and reasons for falling quantity (1) with examples e.g. Greggs (1) any discussion that there might be economies of scale in the long run so prices could fall, output rise (1)	**(4)**

Question Number	Answer	Mark
9(a)	**Theory (2 marks):** Action by firms in contravention of competition law (such as the 1998 Competition Act or the 2002 Enterprise Act) / illegal action (1) which works against public interest/reduces consumer surplus (1), or reduces competition in the market (1). Collusion (1), predatory pricing (1), artificial raising of barriers to entry (1) **Application (2 marks):** banks agree prices on loans (1), share information on the loan market (1) and pricing of their own loans (1), so that there is a higher interest rates charged to consumers (1), fewer loans are offered (1). Use of text e.g. 'illegally given pricing data' and fine £28m (1 + 1)	**(4)**

Question Number	Answer	Mark
9(b)	KAA 4 marks **Diagram (2 marks)** showing increased AR and MR (1) with new profit area shown (1), **or** falling AC only (if fixed costs have fallen) or AC and MC shift (if variable costs have fallen) (1)with new profit area shown (1) **Analysis/data (2 marks)**: AR and MR owing to increased demand after credit crisis, increased confidence, allows more businesses to demand loans from banks; **or** AC and/or MC costs may fall because staff costs fall , falling costs of inter-bank loans as economy recovers from credit crisis (2 marks) Evaluation 4 marks Award up to two evaluation points: 2 x 2 marks or 3+1 or 4+0 Points might include: • Lack of information provided, e.g. only first quarter profits are given • Possible impact on quality of service or worker morale • Judgement that banks are abusing their power over SMEs, e.g. charging high interest rates even though base rates have remained at an all time low, or other fairness issues • Banks are essentially nationalised, so the profits should go to the taxpayer; Extract 3 'we will not stand idly by' – the government must act • Questioning of the ceteris paribus assumption, set out as an argument. For example, costs might change as well as demand, or vice versa. Or there might be efficiency gains with new technology or redundancies but service suffers. • Profits are small in comparison with pre-credit crisis	**(8)**

	• Short run/long run issues, e.g. The firms may need to re-hire workers when full recovery takes place, recent developments 2011/12 and conditions have worsened since then, greater pressure from the government to lower profits in the future/ future punitive tax if there is no change • Advantages of profit of banks, e.g. to tax revenues? • Cost of redundancy payments	

Question Number	Answer	Mark
9(c)	KAA 6 marks Award 3 types/methods of regulation OR 3 types of efficiency for 2 marks each, or 2 x 3 marks, or a combination of the two: KAA marks are to be awarded for two/three reasoned **explanations**, either in terms of the **effects** of two/three different types of regulation on efficiency, or the **effect** of regulation on two/three types of efficiency, rather than for a simple **identification** of the types of either regulation or efficiency. • Possible examples of types of regulation include: monitoring; target setting; price capping (e.g. RPI-X); fines. • Possible types of efficiency include: productive; allocative; dynamic, x-inefficiency, with explanation (not just defined). These points may be illustrated by relevant diagrams, and KAA marks can be awarded for this. **Role** of competition authorities: to promote competition, to promote the public interest, to increase cost effectiveness (may be implicit) (1 mark) Examples of points might include: • How regulation affects costs and pricing e.g. likely to force banks to cut costs (more productive efficiency) by cutting bonuses, • likely to improve allocative efficiency as prices become lower, • increasing consumer surplus as regulators force prices down; • Impact on pay structure, Impact on banks' treatment of SMEs • Economies of scale, if linked to regulation N.b. answers might relate to OFT or Competition Commission, or other regulatory body such as the FSA or banking ombudsman, or direct intervention by government, e.g. punitive tax Evaluation 6 marks **Candidates can argue that the regulations are**	**(12)**

	advantageous or disadvantageous as evaluation marks • Now that many banks are essentially owned by the taxpayer this might change the objectives of banks • Small businesses are collectively the biggest employer in the UK, or other reasons to support SMEs • Banks should be allowed to recompense their staff in a manner that improves and rewards effectiveness which justifies the higher bonuses • Competition authorities do not have the power to address this issue • Increased regulations will make the market less contestable/efficient • Difficult to decide where P=MC • How big should the fines be • Regulatory capture • Diseconomies of scale as firms have to expand credit to SMEs, separating functions of banks to retail/wholesale • Conflict between quality of service (allocative efficiency) and reduction in costs (productive efficiency) • Firms might lose their best managers if pay is capped • Allow macro arguments if related to efficiency, e.g. banks might move abroad • conflicts inherent in some types of regulation, e.g. rate of return and efficiency • making mergers **easier** could be seen as decreasing regulation	

Question Number	Answer	Mark
9(d)*	**KAA 8 marks (award up to four points etc)** (2 + 2 + 2 + 2) or (3 + 3 + 2) or (4 + 4) Application (2): Barclays had used pricing information (1), but now they have reported it (1) Reasons might include: • To gain more market share (e.g. by cutting prices) • To damage RBS profits/image • To avoid being fined • To make more profit/revenue • Advantages of first mover If no reference to game theory or Barclays' changing behaviour then award a maximum of 6/8 KAA marks. For a well developed game theory analysis, 8/8 marks can be awarded. 2 marks for accurately labelled and contextual pay-off matrix, and 2 marks for discussion of prisoners' dilemma. **Evaluation (8) (award up to 4 points etc)** (2 + 2 + 2 + 2) or (3 + 3 + 2) or (4 + 4) • Firms unlikely to trust each other in future negotiations • Long term application of prisoners' dilemma – second rounds of the game • Problems in finding an equilibrium • Threat of fines and other actions by competition authorities might change the behaviour further • Not enough/inaccurate information provided • Use of game theory to evaluate is rewarded. • Kinked demand curve might be used to show why collusion is still more profitable • The may be other strategic reasons to break the agreement, apart from avoiding the fine • Discussion of why collusion is more likely in this market, in relation to market structure • Prioritisation of likely reasons, e.g. the fine is huge • Damage to brand image of Barclays in addition to RBS • Size of fine	**(16)**

Question Number	Answer	Mark
10(a)	**Theory 2 marks:** Identification of market structure (1) and characteristic (1): oligopoly – high levels of marketing, brand awareness, interdependence, a few firms dominate the industry, a high concentration ratio, high barriers to entry. Allow duopoly. Allow monopoly if linked to 25% market share. **Application 2 marks:** heavy use of marketing techniques, e.g. High levels of non-price competition and payment to search engines, bar chart illustrates five powerful firms, Danone and Yoplait are strong brand names, Danone and Yoplait dominate in the US, e.g. ''equally placed'. Lactalis' bid of $1.76bn in $3.7bn industry. (1 + 1 or 2 marks for a well developed application.	**(4)**

Question Number	Answer	Mark
10(b)	**KAA 4 marks: Award two reasons (2 + 2)** Government intervention aims to restore or retain competition (e.g. lower prices, more choice), protect jobs, keep investment within a country, making collusion less likely. Allow macro arguments, e.g. protecting exports, economic growth, balance of payments, multiplier, tax revenue. Also allow political reasoning, such as falling employment will lose the government's voters Evaluation 4 marks (2 +2 or 3+1 or 4+0) • There are advantages to inward investment, and mergers may benefit employment prospects if the firm is more secure when merged • such protectionism may encourage inefficiency • The buying of the firm might not change where the firm is located so tax revenues, employment, balance of payments etc. might not change • Government should **not** be concerned because cross-subsidisation might improve consumer welfare • Only 50% of the business will be sold, so the foreign buyer will not have controlling rights • magnitude of unemployment • reference to frailty in current economic climate	**(8)**

Question Number	Answer	Mark
10(c)	**KAA 6 marks (2+2+2 or 4+2 or 3+3)** **Benefits for PepsiCo** (up to 4 marks): • Economies of scale (different forms might count as two factors), • Other benefits of diversification • Improve 'healthy' image • Emerging US market – increased potential for profit • Spreading risk • Buying into a ready-made distribution network, via General Mills **Benefits for consumers** (up to 4 marks): • Increased choice and availability • Lower prices if cross subsidisation/economies of scale occurs with consequent welfare implications • Improved quality owing to innovation/investment by cross subsidisation • Can allow credit for consumers as employees • Improved health? **Cap at 4/6 marks if only one stakeholder is discussed** **Evaluation 6 marks (2+2+2 or 3+2+1 or 3+3)** **Costs for PepsiCo:** • Lack of expertise in new markets • diseconomies of scale, e.g. Management problems, communication problems • Cost of takeover – potential damage to share price • PepsiCo will not gain complete control – PAI Partners are only selling 50% • Risk of investigation by competition authorities **Costs for consumers:** • Increased prices/loss of consumer surplus • Increased price in the long run as market power/marketing costs increase • Health risks of Pepsi are blurred *Allow credit for all the usual evaluation points.*	**(12)**

Question Number	Answer	Mark
10(d)*	**KAA 8 marks Award up to four factors 2+2+2+2 or 3+3+2 or 4+4** Points might include: Pricing strategies: • Competition might make firms increase output and reduce prices; • predatory pricing, • limit pricing, • sales max pricing, • collusion • Competition might drive down profits so firms may have to cut costs or raise price to retain profitability, • temporary offers to reduce prices, allow BOGOF Increased non-price competition, for example: • coupons, • advertising, • website development, • investment in quality, • widening product range, • loyalty schemes, • BOGOF, • mergers, • collusion • social networking sites There may be no reaction Some firms may leave the industry Generously award the use of game theory, but not required for this question. 2 marks for accurately labelled and contextual pay-off matrix. Cap at 6/8 marks if no use of data **Evaluation 8 marks Award up to four factors 2+2+2+2 or 3+3+2 or 4+4** Firms might keep prices stable (e.g. kinked demand analysis), increase advertising (increase costs); operating at a loss on some products might catch the attention of the competition authorities (fines etc) Evaluation might take the form of a critique of game theory or other approaches • Distinction between *all* yogurts and Greek yogurt	**(16)**

	• Firms might keep prices stable (e.g. kinked demand analysis), increase advertising (increase costs); • operating at a loss on some products might catch the attention of the competition authorities (fines etc) • Other factors are not equal – e.g. in a recession the market may require higher levels of advertising or risk taking, or lower marketing costs if advertisers are keen to attract business • the reaction may be different in some countries than others, e.g. China vs US, or other use of data • predatory pricing/collusion illegal and would attract a large fine • barriers to entry e.g. economies of scale/reputation/advertising • *Yoplait Greek* made a sudden but very significant entry into the market – they might leave just as quickly • Barriers to entry are low once the brand name Yoplait is already established, other contestability issues such as questioning the costs of setting up production of new product • There may be no reaction (can be used as an evaluative point as a critique) e.g. because the firms are interdependent (this might be developed using game theory or kinked demand analysis) • Comment on the efficacy of non-price competition, • Critical development using game theory, e.g. price war, prisoners' dilemma • Prioritisation, e.g. non-price behaviour is more likely because it is an oligopoly • importance of behaviour/need to respond in short run/long run	

Item number	AO1	AO2	AO3	AO4	Total
1	2	1	1		4
2	2	1	1		4
3	2	1	1		4
4	2	1	1		4
5	2	1	1		4
6	2	1	1		4
7	2	1	1		4
8	2	1	1		4
9a	2	2			4
9b		2	2	4	8
9c		2	4	6	12
9d		4	4	8	16
10a	2	2			4
10b		2	2	4	8
10c		2	4	6	12
10d		4	4	8	16
TOTAL	18	18	18	18	

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Edexcel GCE

Economics

Advanced
Unit 3: Business Economics and Economic Efficiency

Friday 17 June 2011 – 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** 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.

Turn over ▶

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P 3 8 8 1 9 A 0 1 2 8

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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 use diagrams in your answers.

1 Firms are leaving a perfectly competitive industry. This suggests that for these firms:

(1)

A average revenue exceeds marginal revenue

B marginal revenue exceeds average revenue

C average fixed cost exceeds average revenue

D average variable cost exceeds average revenue

E average costs equal average revenue.

Answer ☐

Explanation

(3)

(Total for Question 1 = 4 marks)

2 Firms tendering for a private finance scheme from the government verbally agree with each other to fix a higher price than if there were independent bids. This is an example of:

(1)

A tacit collusion

B overt collusion

C symmetric information

D monopolistic competition

E regulatory capture.

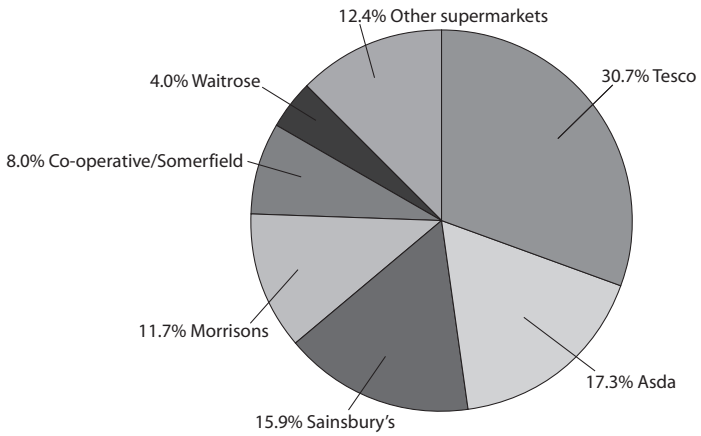
Answer ☐

Explanation

(3)

(Total for Question 2 = 4 marks)

3 The following pie chart shows market shares in the UK grocery industry in 2009.



Source: adapted from http://www.tnsglobal.com/news/news-56F59E8A99C8428989E9BE66187D5792.aspx

Which of the following statements is true in the UK grocery market?

(1)

A It is monopolistically competitive

B It has a low level of concentration

C The four firm concentration ratio is 75.6 per cent

D It is perfectly competitive

E The three firm concentration ratio is 60.4 per cent.

Answer ☐

Explanation

(3)

(Total for Question 3 = 4 marks)

4 Reliance Industries Ltd (RIL) is an energy group which refines oil into petrol in India. In 2002 it merged with a crude oil extraction firm. What might be RIL's reason for this merger?

(1)

A To gain from the benefits of horizontal integration

B To gain from the benefits of backward vertical integration

C To gain from the benefits of forward vertical integration

D To gain from the benefits of conglomerate integration

E To avoid diseconomies of scale.

Answer ☐

Explanation

(3)

(Total for Question 4 = 4 marks)

5 If a firm's fixed costs increase by 20 per cent, marginal costs will increase by:

(1)

A zero

B 10%

C 20%

D 100%

E 200%.

Answer ☐

Explanation

(3)

(Total for Question 5 = 4 marks)

P 3 8 8 1 9 A 0 6 2 8

6 A profit maximising monopolist operates at the output level where:

(1)

A average revenue equals average cost

B total revenue is at a maximum

C the price is equal to the marginal cost

D the price is equal to the marginal revenue

E the marginal profit is zero.

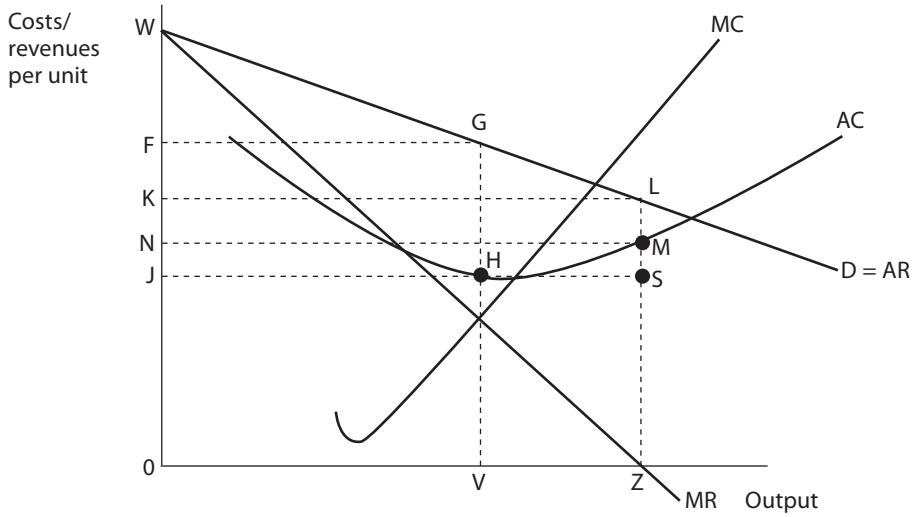
Answer ☐

Explanation

(3)

(Total for Question 6 = 4 marks)

7 The diagram shows a firm in monopolistic competition in the short run.



Which of the following statements is true?

(1)

A New firms will enter the industry in the long run

B Demand for this firm's products will increase in the long run

C Collusion will occur

D The supernormal profit level is NKLM

E The firm is producing where demand is price inelastic.

Answer ☐

Explanation

(3)

(Total for Question 7 = 4 marks)

8 On 1 November 2009 a new law in the UK gave financial regulators the power to impose fines on banks if they deliver poor service to customers. This method of government intervention in markets is a form of:

(1)

A price capping

B monitoring of prices

C public private partnership

D competitive tendering

E performance targeting.

Answer ☐

Explanation

(3)

(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 19.

You should spend 55 minutes on this section.

9 Maintaining competition in markets

Extract 1 Reckitt could face £80m fine over Gaviscon 'market abuse'

The household goods giant Reckitt Benckiser (RB) has been accused by the Office of Fair Trading (OFT) of deliberately exploiting its 'dominant market position' to stop National Health Service (NHS) doctors from supplying generic (unbranded) versions of its Gaviscon indigestion medicine. When a patent ends, rival companies can legally copy the ingredients of the drug using the generic formula.

However, RB withdrew Gaviscon Original from the NHS prescription database with the effect that open competition was delayed until 2007. This meant that when doctors tried to prescribe the original product, they could only find the new Gaviscon Advance on the database. This new drug is patent-protected until 2016. An industry informant claimed that generic copies of Gaviscon Original could have saved the NHS about £40 million since 1999, when the patent ended.

If it is found to have abused its power, the OFT could fine RB – which also makes the painkiller Nurofen and the dishwasher powder Finish – up to 10 per cent of its annual sales, which came in at £7.78bn in 2009. The accusation by the OFT is significant because Gaviscon is a major contributor to RB's revenues.

While Gaviscon Original is still available as an over-the-counter product, Reckitt has previously commented that it was the second largest prescribed brand on the NHS. Reckitt said: 'Reckitt Benckiser believes it competes fairly and within the letter and spirit of the law. RB has stated that up to 80% of its revenues and profits from pharmaceutical sales could be lost after the launch of generic competitors.'

Other OFT Investigations

The Office of Fair Trading's assault on the medicines market is the latest example of its increasingly aggressive interventions under chief executive John Fingleton. Since arriving at the OFT in 2006, Mr Fingleton has stepped up the regulator's activities, launching a string of investigations into industries ranging from housebuilding to supermarkets to banking. 'The OFT recently announced a review of barriers to entry, exit and expansion in the retail banking market. We are now talking to various companies about how well some financial markets work. Except where there are serious breaches of the law, the OFT's preference is to seek ways for market problems to be resolved by companies themselves rather than by imposing solutions.'

There have been some OFT failures, for instance the attempt to regulate the banks regarding unauthorised overdraft fees failed when the High Court ruled that the charges were beyond the control of the OFT. However, a string of investigations is continuing, into both market abuse cases and more straightforward competition matters. The OFT is seeking, for example, the right to consider the merger of T-Mobile and Orange in the UK, rather than leaving the decision to Europe's competition watchdogs.

Source: The Independent Online February 24 2010 James Thompson http://www.independent.co.uk/news/business/news/reckitt-could-face-16380m-fine-over-gaviscon-market-abuse-1908493.html' and http://www.telegraph.co.uk/finance/businesslatestnews/7535749/Are-City-markets-working-for-business-and-the-economy.html, 30 March 2010

(a) With reference to Extract 1, explain why governments allow patents to be granted.

(4)

(b) Assess the economic effects on consumers of increased competition from generic (unbranded) products within the healthcare market.

(8)

*(c) With reference to the information provided and your own knowledge, to what extent is the government's competition policy successful in promoting competition between firms?

(12)

*(d) To what extent does the threat of competition affect a firm's behaviour? Answer either with reference to the healthcare product industry or to an industry of your choice.

(16)

(a) With reference to Extract 1, explain why governments allow patents to be granted.

(4)

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(8)

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(12)

*(d) To what extent does the threat of competition affect a firm's behaviour? Answer either with reference to the healthcare product industry or to an industry of your choice.

(16)

P 3 8 8 1 9 A 0 1 6 2 8

(Total for Question 9 = 40 marks)

If you answer question 10 put a cross in this box ☒ .

10 Chocolate Manufacturing and Retailing

Extract 1 Profits rise at Thorntons

Mike Davies, Thorntons' chief executive of the UK's remaining large chocolate manufacturer, reported 25% higher profit, despite a small fall in total sales. As well as from its own shops, Thorntons sells chocolates through its website and to other retailers, such as supermarkets. Sales to other retailers rose by 6.5% to £34.6 million in the 26 weeks to 9 January 2010. In boxed chocolate, Thorntons' sales have grown 82% in the past two years, compared with a 7% decline recorded by Cadbury.

The company hopes that a new range of products will help it to become profitable in the second half of the year, which includes the summer months. Thorntons usually records a loss in the second half of the year, because customers eat less chocolate in warmer weather.

Source: http://business.timesonline.co.uk/tol/business/industry_sectors/retailing/article7031407.ece
The Times February 18, 2010 'Thorntons plays hard ball on the high street as profits rise' Marcus Leroux

Extract 2 Kraft takes over Cadbury to become world's biggest confectioner

Kraft's offer to buy Cadbury was accepted by Cadbury's board on 19 January 2010. Kraft, the US food giant, will pay £11.7 billion for Cadbury in cash and shares, some 50% more than the firm's value before the bidding started in September.

Kraft's acquisition may be a good deal for both companies. Kraft has little presence in Britain's confectionery market, where Cadbury is strong, but it has thriving businesses in mainland Europe and Russia where Cadbury has made minimal progress. Cadbury is strong in India and various Commonwealth countries, and has a booming chewing-gum business, particularly in Europe and Latin America, an area where Kraft has little expertise. Between them they can make up lost ground in China, where Mars holds the upper hand. The deal is also set to yield cost savings of £414m a year for the combined firm, operating at a larger scale in emerging markets. This is a good deal for most Cadbury's workers. However, the fact that so much of the deal is financed by debt is a negative: borrowing that looks cheap today could double in price tomorrow. That would eat up the cost savings on marketing and administration already factored into the purchase price, and perhaps force undesirable cuts to operations. Cadbury is already efficient: under its current management it has reduced costs significantly, for example, by off-shoring more of its operations.

Three-quarters of mergers result in a fall in short run profits. In such a sensitive consumer sector, the risks of a culture clash and brand destruction are high. That is what happened to Terry's, a smaller York-based chocolate company bought by Kraft in 1993. Terry's has lost visibility in Britain since production was relocated to central Europe in 2005. The same problem could await Cadbury.

There are understandable fears that foreign owners will be more likely than domestic ones to axe British jobs or use British profits to pay off their global debts. But all successful big firms, British and foreign alike, respond to the demands and opportunities of the global marketplace these days, and, as Cadbury's current managers have shown, their behaviour is rarely determined by their nationality.

The management practices of multinational companies tend to be better than the average in any country they operate in. In theory, then, Kraft's takeover of a British firm should bring better management to Britain. One problem: Cadbury is itself a multinational, and in no need of lessons from Kraft.

Source: adapted from http://bit.ly/89Azni
'Cadbury goes American. Is this healthy for British manufacturing? ' *The Economist* Jan 19th 2010 and http://bit.ly/aaFiRe Jan 21st 2010 'Manufacturing blues: Another one bites the dust' Jan 21st 2010

Extract 3 Kraft to close Cadbury plant it offered to keep open

Kraft Foods has gone back on its promise to keep open a Cadbury factory in Somerdale near Bristol, just weeks after the British chocolate maker accepted its £11.7 billion offer. The plant, which employs 400 staff, will be closed in 2011. The Unite union said: "This sends the worst possible message to the 6,000 other Cadbury workers in the UK and Ireland. It tells them that Kraft cares little for their workers."

Source: http://www.telegraph.co.uk/finance/newsbysector/retailandconsumer/7199322/Kraft-to-close-Cadbury-plant-it-offered-to-keep-open.html Amy Wilson and Jonathan Russell 09 Feb 2010

(a) Using an appropriate cost and revenue diagram, show why 'Thorntons usually records a loss in the second half of the year' (Extract 1, lines 8–9).

(4)

(b) Examine **one** reason why Thorntons is likely to sell its chocolates at a higher price in its retail shops than through its website.

(8)

*(c) Assess how the newly combined Kraft and Cadbury food company could increase its share of the chocolate market in competition with Mars. Refer to game theory in your answer.

(12)

*(d) With reference to the information provided, evaluate whether Kraft's takeover of Cadbury is likely to increase economic efficiency.

(16)

(a) Using an appropriate cost and revenue diagram, show why 'Thorntons usually records a loss in the second half of the year' (Extract 1, lines 8–9).

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(12)

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(16)

(Total for Question 10 = 40 marks)

TOTAL FOR SECTION B: 40 MARKS
TOTAL FOR PAPER: 72 MARKS

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Mark Scheme (Results)

June 2011

GCE Economics
(6EC03) Paper 01

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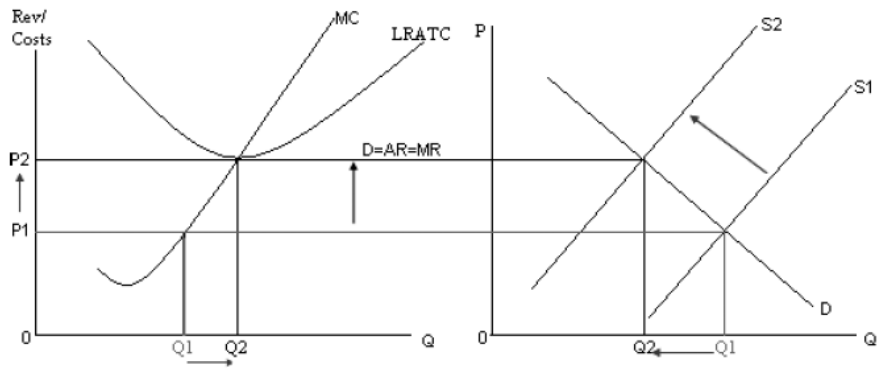
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You can also telephone 0844 372 2187 to speak to a member of our subject advisor team.

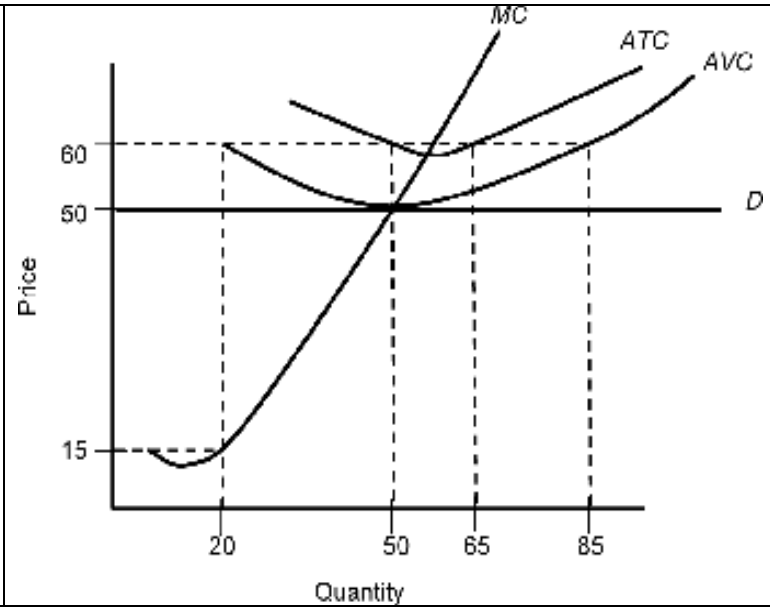
June 2011
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If an incorrect key has been chosen, the explanation can earn up to 3 marks on questions 1 and 2 ONLY. For questions 3 to 8, if the key is wrong, the maximum score is 2 out of 4.

Incorrect options can be knocked out, but the letter of the knocked out key must be given, along with relevant economic reasoning. If more than one key is knocked out for the same reason this will earn one mark. There must be different reasons for each knock out. Up to two knock out marks can be awarded for each supported choice question.

Question Number	Answer	Mark
1	**D** Definition of AVC or AR (1) Identification of any characteristics of perfect competition e.g. that there are no barriers to entry/exit, or firms are price takers (1) Shut down point is AVC = AR or AVC>AR in short run (1) Firm is making a loss (1) staying in production means that losses would increase (i.e. reason for leaving) (1). No **contribution** is made to fixed costs (1) Losses act as a signal for firms to leave the market (1), In the long run the shut down point is AVC=AR because all cost are variable (1) Diagram showing short run loss-making firm (1) with industry diagram showing leftwards shift in supply (1) with long run rise in price (1) OR diagram showing AVC not or just covered (1) with shut down point (1)  OR (ignore numbers)	**(4)**


MC
ATC
AVC
60
50
D
Price
15
20
50
65
85
Quantity

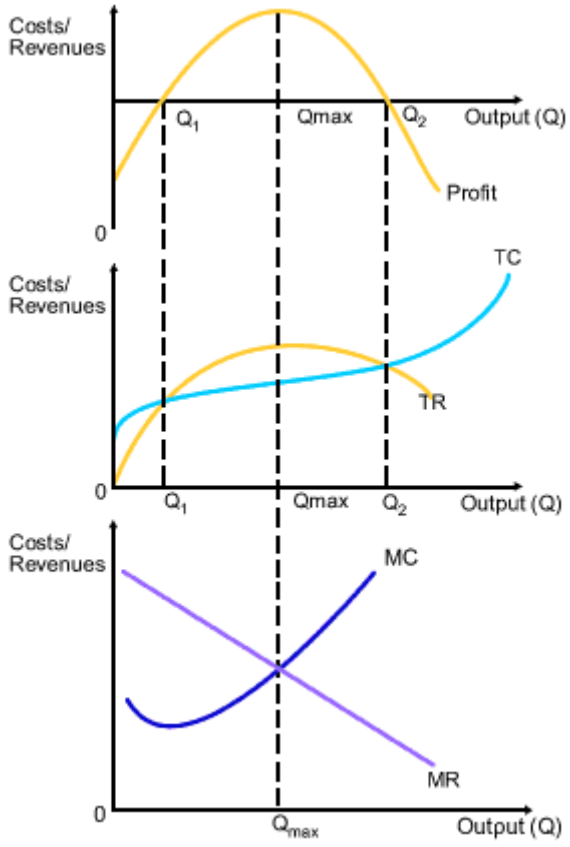
Question Number	Answer	Mark
2	**B** Definition of overt collusion, e.g. that is spoken, open or traceable (1) application of text firms 'verbally agree' (1) which is a form of **cooperation** or collaboration(1) with rationale, e.g. that prices will be kept high or higher profits(1) application to PFI e.g. explanation of a tendering process (1) by private firms for government contracts (1) illegal (1) powers of competition policy e.g. fines (1) although sometimes hard to prove (1)	**(4)**

Question Number	Answer	Mark
3	**C** Definition of Concentration Ratio: the n firm CR is the proportion of the market controlled by the largest n firms or theoretical formula e.g. (Σ market share of n largest firms) Method mark 30.7% + 17.3% + 15.9% + 11.7% (1) The market is highly concentrated (1) Characteristics of oligopoly e.g. it means interdependence, a few firms dominate the market, or higher entry and exit barriers (or other definition of sunk costs) (1) with examples from grocery market e.g. advertising (1). Calculation of other concentration ratios: e.g. 3 firm 63.9% is a knock out mark (1) Application e.g. Tesco is a legal monopoly (1)	**(4)**

Question Number	Answer	Mark
4	**B** Definition of **vertical** integration e.g. joining with a firm involved in the same industry but at a different stage of production (1) Application of **backwards**: closer to the raw materials in the supply chain (1) e.g. buying crude oil supplies (1) with rationale e.g. to gain a reliable supply source or to cut costs of supply (1) Further application to oil industry e.g. crude oil is the largest cost for a petroleum firm (1)	**(4)**

Question Number	Answer	Mark
5	**A** Definition of marginal costs, or formula e.g. the cost of producing one more unit or ΔTC/ΔQ (1) and relation to variable not fixed costs (1). Explanation that fixed costs do not change with output, or have to be	

	paid whatever the output (1) Marginal cost will be affected by changes in variable cost (1) Example of fixed costs, e.g. rent (1) Application to fixed costs that when they change it is not because one more is being produced, but the scale of production is changed (1) Marginal cost is the gradient of total costs (1) Diagram showing parallel upward shift in TC or TFC (1) with no change in gradient (1) **or** upward shift in AC (1)**with** no change in position of MC (1)	**(4)**

Question Number	Answer	Mark
6	**E** Definition of marginal profit e.g. the increase in profit when one more unit is sold or the difference between MR and MC or MR-MC=0 (1) with MC=MR (verbally or as diagram)(1) and marginal analysis of this point with diagram showing TR and TC (1) with the greatest positive difference (1) marginal analysis showing what happens before and after MC=MR (1 + 1) Diagram (up to three marks) might include elements of the following: Vertical line connects profit maximisation with MC = MR (1) Gradient of total profit curve is zero where marginal profit is zero (1)  	**(4)**

	Allow elements of this diagram (you are unlikely to see all of this), or other versions showing the difference between MC and MR as marginal profit, or shading area of total profit.	

Question Number	Answer	Mark
7	**A** Definition of monopolistic competition, or at least one of the following characteristics: many buyers and sellers, low or no barriers to entry, slightly differentiated products. In the long run, AR=AC (1) with normal profit built into AC (1). Firms will enter because there are low barriers to entry (1) and profit acts as a signal for firms to enter (1) until the profit is competed away (1). Supernormal profit is FGHJ in the short run or shading on diagram (1) and zero in the long run (1). Diagram showing shift inwards of AR and MR (1) with tangential AR and AC (1). Knock-out of D: NKLM is the profit area for a **revenue** maximising firm (1)	**(4)**

Question Number	Answer	Mark
8	**E** Definition of performance targeting e.g. a goal is set by government or a regulator for firms to achieve (1). Role of regulator: improving consumer interests or reduce monopoly power or surrogate for competition (1 + 1) Application e.g. number of complaints, reducing queuing time, improved customer service (1) Role of fines as a deterrent through effect on a firms' costs or profits (1)	**(4)**

Question Number	Answer	Mark
9(a)	**2 marks for theory of a patent** – legal protection/rights (1) of an idea or process (1) which acts as a barrier to entry (1) or incentive to invest (1) giving **property** rights/receiving the rewards (1) for a certain period of time (1) **2 marks for application e.g.** gives RB incentive to invest (1) and innovate without fear of competition from other large pharmaceutical firms meaning that the investment could not otherwise be recouped (1). Gaviscon Original patent expired in 1999 which means there are now many generic substitutes (1) so they can 'legally copy the ingredients' (lines 4-5); RB says it would lose 80% of its revenues (line 19); Gaviscon products could be sold more cheaply or the patent makes the prices higher (1) which would have saved the NHS £40m (1); external benefits of research in pharmaceuticals (1); new patent will last until 2016 (1) or old one expired in 1999 (1) innovation is particularly important in the pharmaceutical industry (1).	**(4)**

Question Number	Answer	Mark
9(b)	**KAA (4 marks).** Award up to 2 factors e.g. (2 + 2) or (3 + 1) or (4 + 0) **The advantages might be seen as KAA and disadvantages as Evaluation, or vice versa.** Advantages for consumers might include : • higher consumer surplus, increased allocative efficiency • Fall in demand for individual firms so **prices fall**/increased productive efficiency • Reallocation of income from firms to consumers • increased efficiency in firms/reduction in monopoly power may mean higher **quality** products and more **choice** • **innovation** is encouraged as firms need to keep ahead, improving consumer choice • where the consumer is the government/NHS, there is reduction in costs to government, decreased tax, increased spending elsewhere • where the consumer is in developing countries, there may be significant improvements in health/falls in poverty Award diagram (up to 2 marks) for firms seeing a fall in AR and MR, with consequent fall in price, output and profit OR market diagram showing lower prices and more choice as supply increases. **Evaluation (4 marks).** Award up to 2 factors e.g. (2 + 2) or (3 + 1) or (4 + 0) Points may include: • More competition might mean underinvestment in R&D/innovation/investment • Quality may be reduced as a cost cutting measure • It depends on the quality of the new products as to the extent of the benefit to the consumer • Firms may leave the market, meaning less choice for customers • Consumer benefits may be compromised if firms overcome the problem of competition by advertising/branding • Benefits to the NHS might not be passed through to consumers of NHS • Increased competition may have no effect if the brand image is strong/if NHS is not driven to reduce costs	**(8)**

	• Competition might be wasteful, e.g. the economies of scale argument • Asymmetric information in the buying of healthcare products	

Question Number	Answer	Mark
9(c)*	**KAA (6 marks).** Award up to 3 factors e.g. (2 + 2 + 2) or (3 + 2 + 1) or (3 + 3) Definition of competition policy or role of OFT or role of Competition Commission e.g. laws or policies aimed at promoting market competition (1) Success of OFT/competition policy: • Fines and other penalties ensure that there is competition • Fear of action by OFT may prevent anticompetitive behaviour (i.e. deterrent effect) • Risk of bad publicity might ensure that firms do not restrict competition • Use of case studies to show improved consumer welfare or choice Success of competition policy more generally: • New powers since 2002 Enterprise Act • Fines based on up to 3 years' turnover, and managers can go to jail • Allow companies to use market solutions (lines 28-29) • The OFT is reducing the power of patents by reviewing barriers to entry Award application marks, e.g. case studies in Extract 1 or own knowledge **Evaluation (6 marks).** Award up to 3 factors e.g. (2 + 2 + 2) or (3 + 2 + 1) or (3 + 3). Reasons why competition policy is not successful might include: • Regulatory capture (Government failure) • Asymmetric information (Government failure) • If policies are too strict it could discourage investment • Administration costs of competition policy • OFT only covers UK but the firms involved are international • The organisations cannot work separately and are shortly to be merged • Failing of bodies to co-ordinate, within the UK and across international boundaries • Limitations of powers, e.g. reference to failure to regulate banks lines 30-32	**(12)**

	• Inconsistencies of competition decisions • Burden of proof is on the firms not the OFT, so there are cost and other implications for firms • Limited resources of competition authorities means that they can make only a very limited impact on the level of competition between large and powerful firms • Brand loyalty may limit the success of competition policy • Significant benefits in cost reductions and research have not been seen in practice. Is the policy a lame duck? • Patents reduce success • Suggestion on how competition policy might improve in the future KAA and evaluation marks may be awarded on either side of the case for and against a judgement of competition policy being successful.	

Question Number	Answer	Mark
9(d)*	**KAA (8 marks).** Award up to 4 factors e.g. (2 + 2 + 2 + 2) or (4 + 2 + 1 + 1) or (3 + 3 + 2) Definition of increased contestability (1) Positive effects on firm's behaviour • Lower prices e.g. price war • better service • firms could enter so the firm must behave as if there were competition by cutting costs • Non profit-maximising pricing • Predatory pricing • Limit pricing • Lower profits force firms to become efficient • Use of pricing policies • Use of non-pricing policies • Use of game theory to explain collusion or other outcomes • Allow use of kinked demand theory to explain why there might be no change to firm's price • M&As • Off-shoring or outsourcing • Increased innovation or efficiency Award use of diagram (see below) showing falling profits. Award max 6/8 KAA if no reference to specific industrial case studies	

	Evaluation (8 marks). Award up to 4 factors e.g. (2 + 2 + 2 + 2) or (4 + 2 + 1 + 1) Factors might include: • More competition might mean underinvestment in R&D • It depends on the size of firms/market structure. If the competition is relatively small relative to the size of incumbents there will be little change in behaviour. • Firms might wait-and-see if the competition has any impact • Patents and other statutory monopoly power reduces impact • The firms might already be acting as if there were competition, if competition authorities act as a surrogate for competition • The importance of quality in the industry as opposed to pricing, so firms are constrained as to their reaction • Prioritisation with justification – e.g. limit pricing might be safer than predatory pricing when judged to be legal • Other differences in the long run • Also allow critique of points made in KAA	**(16)**

Question Number	Answer	Mark
10(a)	Up to two marks can be gained for a fully labelled and correct diagram. Diagram showing fall in AR/MR shift to the left or down (1) and new negative profit area (i.e. loss area) (1) No marks for demand and supply diagram Application 2 marks: Demand or sales falls (1) as it is too hot to eat chocolate , or 'customers eat less chocolate in warmer weather' (Extract 1 lines 9-10)(1)	**(4)**

Question Number	Answer	Mark
10(b)	**KAA (4 marks).** Award **one** factor (up to 4 marks) and up to 2 marks for a price discrimination diagram. Reasons might include: • Higher revenues/profits from price inelastic demand in shops • Larger market share in online sales • Penetration pricing in the online market • Increase loyalty and brand awareness in markets where prices are lower • Price discrimination. Conditions for price discrimination: different elasticities, low cost	

	of keeping markets separate and no arbitrage • Different cost basis e.g. higher overheads or labour costs, Economies of Scale • Different degrees of competition or contestability e.g. Thorntons offers lower prices where demand is more elastic – e.g. online there is more choice • Increased brand loyalty • Higher profits of firm might ensure quality is maintained or now products are brought to market **Evaluation (4 marks).** Award up to 2 factors e.g. (2 + 2) or (3 + 1) or (4 + 0) Factors might include: • Internet not always more competitive – hidden brand loyalty • There may be changes in the long run as more internet shopping is increasingly popular • Conditions of price discrimination do not hold in the long run, e.g. over time the arbitrage becomes easier • Loss of consumer surplus for those with price inelastic demand • Less choice, might lead to consumer loyalty decreasing in the long run • Higher labour costs in running an effective website? • Packaging and production cost are the same, the difference in cost is relative small.	**(8)**

Question Number	Answer	Mark
10(c)*	**KAA (6 marks).** Award up to 3 factors e.g. (2+2+2) or (3+2+1). Reserve at least 2 marks for reference to game theory, but up to 6 marks can be awarded for a fully grounded game theory answer. Factors might include: • Award use of game theory and pay-off matrix, or kinked demand analysis as up to 2 factors of which 2 marks are awarded for a pay-off matrix • Collusion • Price competition • Non-price competition • Reaching a worse outcome than if the decision was made independently, e.g. prisoners'	

	dilemma • Internal growth • More mergers, the combined firm might be more competitive which may result in: o Lower prices o Reduce cost o Synergies **If there is no link (explicit or implicit) to increased market share/revenue then no marks are awarded for the point.** **Mark cap 4/6 marks if no reference to game theory.** **Evaluation (6 marks).** Award up to 3 factors e.g. (2 + 2 + 2) or (3 + 2 +1). Factors might include: • Collusion is illegal – risk of fines. This may be developed using extensions of game theory. • Tacit or overt collusion? • Difficult to prove collusion • Mars is in very different markets, or other magnitude comments about the competition • Cost implications of non-price competition • Other factors not equal • A critique of points made in KAA • Difficult to increase market share by changing price. This may be shown using game theory/kinked demand • Lack of synergy which may lead to less market share (clash of cultures) • Long term cost problem of merger	**(12)**

Question Number	Answer	Mark
10(d)*	**KAA (8 marks).** Award up to 4 factors e.g. (2 + 2 + 2 + 2) or (4 + 2 + 1 + 1) + (3 + 3 + 2) Identification of the meaning of economic efficiency, e.g. increased output from the same amount of inputs, or producing where P=MC Impact of takeover to increase efficiency factors might include: • Rationalisation • Removal of wasteful competition	

	• Economies of scale (different types can count as more than one factor) • Consideration of different types of efficiency, e.g. allocative, productive (different types can count as more than one factor) • Synergies • Extract 2 lines 28-29 Increased management efficiency • Extract 2 lines 16-17 reduce cost by offshoring **Award max 6/8 KAA marks if no specific reference to the information provided** **Evaluation (8 marks).** Award up to 4 factors e.g. (2 + 2 + 2 + 2) or (4 +2 + 1 + 1) Impact to decrease efficiency factors might include: • Costs to owners in terms of risk • finance issues - cost of buying company has direct costs, debt issues • Costs to employees who lose jobs, closure of plants, redundancy packages, bad industrial relationships , threat of industrial action and marketing issues from the bad press (extract 3) will increase costs to firms involved • Allow macro concepts of inefficiency in the sense of unemployed resources, e.g. unemployment is a sign of poor use of resources for the country • Depends on the economic climate/credit crisis • Depends on short run or long run issues • Some efficiencies are affected more than others • Conflict between productive and allocative efficiencies, e.g . cutting costs might damage welfare of the consumer • Diseconomies of scale • Might be subject to attention of competition authorities • Extract 2 lines 16-17 'Cadbury is already efficient' • Increased market power might lead to x-ineffciency • Extract 2 lines 30-31 management is already efficient at Cadbury, and 'in no need of lessons from Kraft' **KAA and evaluation marks may be awarded on either side of the case for and against a judgement of efficiency**	**(16)**

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Surname	Other names

Centre Number | Candidate Number

Edexcel GCE

Economics

Advanced
Unit 3: Business Economics and Economic Efficiency

Friday 28 January 2011 – 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** 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.

Turn over ▶

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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 In March 2009 the UK Competition Commission required British Airports Authority to sell off three of its seven airports, starting with Gatwick and then Stansted.

The most likely reason for the Commission's decision was the

(1)

A increased competition from foreign airports

B monopoly power of British Airports Authority

C high level of contestability in the airport industry

D limit pricing used by the airports

E falling average costs resulting from horizontal integration.

Answer ☐

Explanation

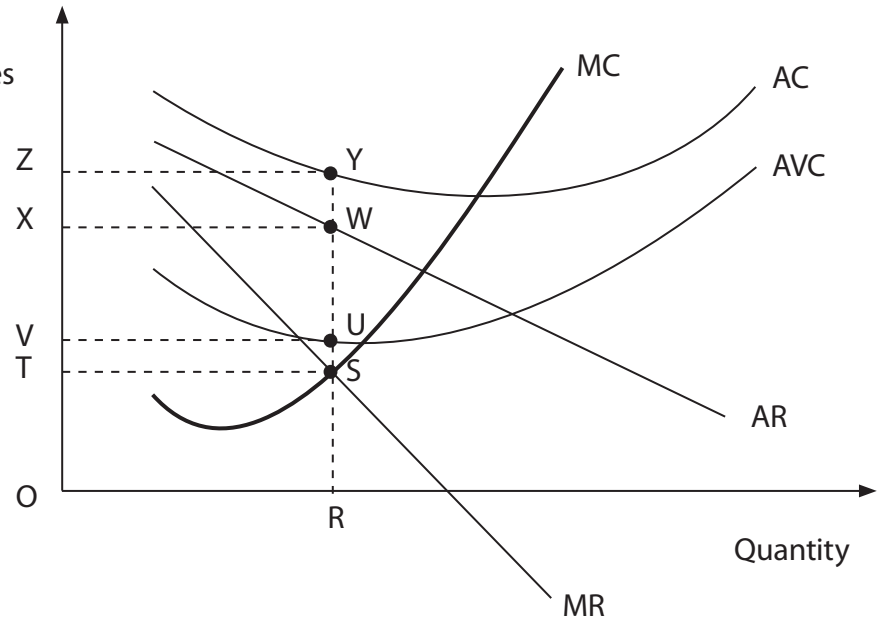
(3)

(Total for Question 1 = 4 marks)

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N 3 7 9 5 6 A 0 2 3 2

2



The diagram shows the costs and revenues for a profit maximising firm in a market. The most likely outcome for the firm, assuming no change in costs or demand, is to

(1)

A continue in business and make supernormal profit ZYWX

B continue in business and raise the price

C continue in business and cut the price

D continue in business in the short run but shut down in the long run

E shut down immediately.

Answer ☐

Explanation

(3)

(Total for Question 2 = 4 marks)

3 At the end of a day's trading a flower seller cuts the prices of all the stock that has reached its 'sell by' date. This pricing strategy is most likely to be

(1)

A fixed cost pricing

B limit pricing

C revenue maximisation pricing

D predatory pricing

E productive efficiency pricing.

Answer ☐

Explanation

(3)

(Total for Question 3 = 4 marks)

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N 3 7 9 5 6 A 0 4 3 2

4 In December 2009 the Royal Mail announced that it had made a 4% increase in profits compared to 2008, despite a fall of 3 million items a day in the amount of post being sent. The most likely reason for the increase in profits was

(1)

A an increase in contestability in the postal market

B a fall in the real price of postage stamps

C a rise in nominal wages of postal workers

D a fall in employment in the Royal Mail

E external diseconomies of scale in the postal industry.

Answer ☐

Explanation

(3)

(Total for Question 4 = 4 marks)

5 On 26 November 2009 the water regulator Ofwat announced that water bills must be cut by an average of £3 a year per household over the next five years and that there must be an extra £1 billion investment by water companies. The most likely reason for these decisions was

(1)

A to increase producer surplus

B to increase the returns to investors in water companies

C to reduce contestability in the water industry

D to force unprofitable firms out of business

E to increase efficiency in the water industry.

Answer ☐

Explanation

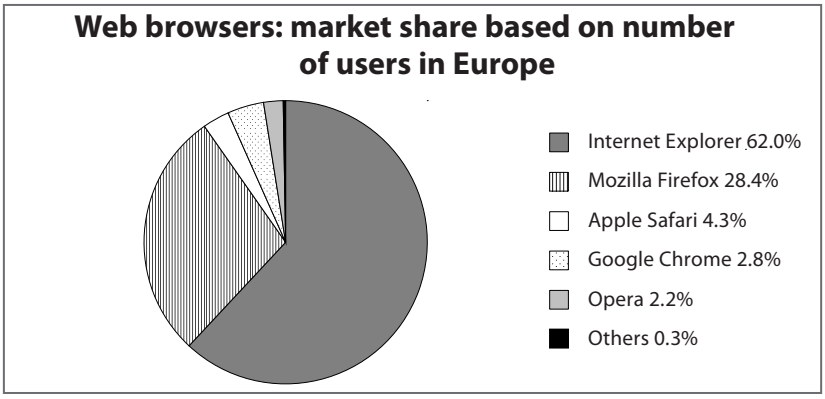
(3)

(Total for Question 5 = 4 marks)

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N 3 7 9 5 6 A 0 6 3 2

6



Source: http://www.atinternet-institute.com/en-us/browsers-barometer/browser-barometer-september-2009/index-1-2-3-180.html

The chart shows the usage-based market share of internet web browsers in Europe. In 2008 the Microsoft computer software company was fined €1.68 billion by the European Competition Commission for pre-installing its browser, Internet Explorer, on computers running the Windows operating system. In December 2009, Microsoft agreed to allow consumers to choose their web browser on setup.

The most likely impact on the market for internet web browsers is

(1)

A an increase in the five-firm concentration ratio in the web browser market

B an increase in profitability for Microsoft

C an increase in advertising revenues for Internet Explorer web space

D a worsening of the quality of the browser products offered in the market

E a decrease in market share for Internet Explorer.

Answer ☐

Explanation

(3)

(Total for Question 6 = 4 marks)

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7 Game theory can be used to illustrate which of the following examples of competitive behaviour?

(1)

A Price leadership in perfect competition

B Revenue maximisation in monopolistic competition

C Limit pricing in monopolistic competition

D Tacit collusion in oligopoly

E Price discrimination by a monopolist.

Answer ☐

Explanation

(3)

(Total for Question 7 = 4 marks)

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N 3 7 9 5 6 A 0 8 3 2

8 A report by the University of East Anglia into the Private Finance Initiative and the Norfolk and Norwich University Hospital in June 2009 argued that the hospital was costing £20 million a year more than if it were run in the public sector.

Source: http://www.uea.ac.uk/polopoly_fs/1.116276!Three%20page%20briefing%20-%20NNUH%20report%20-%20June%202009.pdf.

Which of the following is a reason why the government has encouraged Public Private Partnerships?

(1)

A It is easy to accurately forecast the future costs of projects

B The government has a fiscal surplus

C To increase x-inefficiency in the public sector

D Performance targets have never been set in the public sector

E To make use of private sector finance to fund major projects.

Answer ☐

Explanation

(3)

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(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 20.

You should spend 55 minutes on this section.

9 Iberia and BA merger

Extract 1 Uniting in the sky – Iberia and BA at last agree to get together to sort out their problems



Like two drowning men, Iberia and British Airways (BA) have long seen each other as potential means of staying afloat. The rate at which the airlines have been sinking at last forced them into each other's arms on November 12th 2009, when a merger was agreed. BA made big pre-tax losses in the year to the end of March as it suffered from the credit crisis and the global economic slump. Iberia actually managed a small profit in 2008. Just as the terms of the merger were agreed Iberia announced a loss in the latest quarter, which includes the usually profitable summer months. BA said that it had lost £292m in the first half of the year, which includes the summer period.

These airlines are not alone in their concerns. The total losses for the world's airlines this year are estimated to be £17.6 billion. By agreeing to merge, the two firms will join the trend for big European airlines to get bigger. This has become an attractive means to make substantial cost savings as they compete against low-cost rivals and try to cope with a dramatic fall in numbers of the profit-making business passengers. The two companies estimate that within five years the new group will save some £429m a year by cutting overlapping routes, and by combining maintenance, office functions and business-class lounges. They may also have more buying power when it comes to negotiations to buy new planes from Boeing and Airbus.

The deal will put the firms back into the big leagues of European aviation. Their combined revenues will put them closer to Air France-KLM, the product of a similar deal in 2004 and Germany's Lufthansa, which has expanded its operations with a series of smaller takeovers of Swiss and Austrian airlines since 2005. Iberia and BA will combine their businesses but maintain separate corporate operations. This will allow them to maintain their roles as the national flag-carriers in Spain and the UK while keeping valuable bilateral international landing rights that go along with that status.

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One reason for keeping pace with European rivals is that size will become an important factor if consolidation among airlines goes global. The two airlines are already seeking permission from the competition authorities in America and in Europe for an agreement with American Airlines, which would see all three co-ordinating over costs and revenues on transatlantic routes. However, BA may be required to give up landing slots at Heathrow, a price it has been unwilling to pay in the past.

A protectionist stance in America over the country's troubled airlines has kept a law in place that prevents foreign airlines from owning more than 25% of an American rival. The European Union is pressing for this restriction to be lifted, though there is little sign that it might happen soon.

Source: adapted from Economist.com *'Uniting the Sky'* Nov 13th 2009, http://www.economist.com/businessfinance/PrinterFriendly.cfm?story_id=14887815.

Extract 2 Strike action in response to BA crew reductions and cost cuts

British Airways was preparing for what could be a damaging strike after workers voted to walk out for nearly two weeks. The airline plans to reduce generous staff levels and benefits for Heathrow-based cabin crew.

The union said 80 per cent of its more than 12,000 BA members had voted, recording a 92.5 per cent vote in favour of a strike. The airline has said the move would cause chaos for hundreds of thousands of passengers.

"We're hoping that the size of this vote will make the company think again," said a spokesperson for the union, who added that it would not back down unless BA gave way on the crew reductions that prompted the strike.

Source: http://www.ft.com/cms/s/0/75a53942-e8aa-11de-9c1f-00144feab49a.html.

(a) Using the evidence, explain the type of integration involved in the agreed merger between BA and Iberia.

(4)

(b) Examine the likely reasons why Iberia made a loss during 'the usually profitable summer months', (Extract 1, line 7). Use a diagram to support your answer.

(8)

*(c) Assess the likely impact on contestability of the airline industry resulting from the mergers and agreements referred to in the evidence.

(12)

*(d) Evaluate the likely benefits of the agreed merger between BA and Iberia.

(16)

(a) Using the evidence, explain the type of integration involved in the agreed merger between BA and Iberia.

(4)

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N 3 7 9 5 6 A 0 1 2 3 2

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*(d) Evaluate the likely benefits of the agreed merger between BA and Iberia.

(16)

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(Total for Question 9 = 40 marks)

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If you answer question 10 put a cross in this box ☒ .

10 Newspapers online

Extract 1 Did you pay to read this?

Until recently, there were two types of newspaper website: those that made you pay to read many of the articles (*The New York Times*, *The Wall Street Journal* and the *Financial Times*) and those that didn't.

That is changing. *The New York Times* has announced that almost all its online material would now be free. FT.com has moved to a system of free access for occasional visitors. The theory is that increased advertising revenue will replace subscription revenue. Online advertisers are charged only 20% of the print edition equivalent, and the placing of adverts is tailored to readers' profiles.

The big question is whether online advertising makes more money than subscriptions. Research by the University of Chicago Business School on what the profit-maximising price would have been for online access suggests that washingtonpost.com would probably have made more money by charging a few dollars a month back in 2001 or 2002, when it offered free access. But by 2004, as the online advertising market improved, charging for access no longer increased total revenues.

Source: adapted from FT.com 20 October 2007 *Undercover Economist: Did you pay to read this?* Tim Harford.

Extract 2 More bad news for the newspaper business

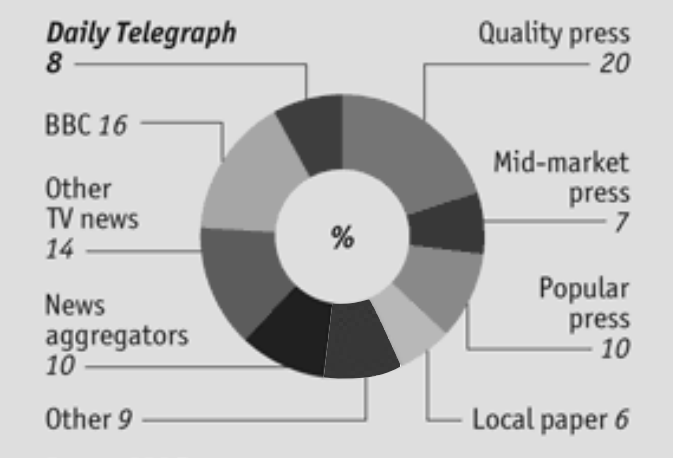
The decision to give away newspaper content free online is increasingly viewed as one of the world's worst-ever business decisions. But any newspaper firm which wants to undo this error has a problem. If one newspaper starts charging, readers may migrate to those that remain free. If, on the other hand, a lot of papers begin charging at the same time, readers might be pushed into paying. This plan has always seemed optimistic. A study released this week suggests it may be completely wrong.

Oliver & Ohlbaum, a media consultancy, asked people what newspaper they tended to read and whether they subscribed to it (most get their papers from shops). Then they asked readers about where they went for news on the internet. The results were consistent: when it comes to online news, Britons are shamelessly disloyal.

The theory underlying most papers' online strategies is that people will buy a favourite newspaper and then go to its website for breaking news and extras such as blogs. But fans of the *Daily Telegraph*, for example, the most popular quality daily paper, got just 8% of their online news from its website (see Figure 1). They spent twice as much time visiting the BBC's news website and more than twice as much reading other quality papers.

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Figure 1 Percentage of time spent reading online news sources by *Daily Telegraph* readers



Source: Oliver & Ohlbaum Trends November 2009, used in *The Economist*, 3 December 2009.

The survey also contained bad news for those publishers hoping to co-ordinate attempts to charge. When *Guardian* readers were asked whether they would pay £2 a month to read their favourite paper online, 26% said yes. But what if all newspapers charged? The proportion prepared to pay for the *Guardian* might have been expected to rise. Instead it fell to 16%. This seems odd, until one considers readers' disloyalty. Readers protested at the prospect of having to pay repeatedly to continue to access a wide variety of news sources. The questions are hypothetical, and people may react differently if and when charges for online news are introduced. However, this survey will hardly encourage newspaper owners to charge for online services.

Source: adapted from *The Economist* print edition 'The promiscuity problem', 3 December 2009.

Figure 2 Newspaper sales (hard copy) circulation, daily

Title	2001	2005	2009
The Financial Times	478 161	422 519	426 676
The Telegraph	1 022 263	920 745	783 210
The Times	734 220	686 327	617 483
The Sun	3 636 561	3 382 509	3 146 006
Total of all daily newspapers (rounded)	15 500 000	13 300 000	13 000 000

Source: Audit Bureau of Circulations http://www.abc.org.uk/ accessed via http://en.wikipedia.org/wiki/List_of_newspapers_in_the_United_Kingdom_by_circulation#Circulation_1950.E2.80.931999.

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(a) Explain **one** possible reason for the trend in newspaper sales as shown in Figure 2.

(4)

(b) Assess the possibility of some printed newspapers shutting down as a result of the trend in newspaper sales.

(8)

*(c) To what extent might the contestability of the markets for online news and printed newspapers differ?

(12)

*(d) Evaluate price and non-price strategies newspaper organisations may pursue to increase profitability.

(16)

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N 3 7 9 5 6 A 0 2 2 3 2

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(4)

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N 3 7 9 5 6 A 0 2 6 3 2

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(Total for Question 10 = 40 marks)

TOTAL FOR SECTION B: 40 MARKS
TOTAL FOR PAPER: 72 MARKS

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January 2011

GCE

GCE Economics (6EC03/01)
Paper 01

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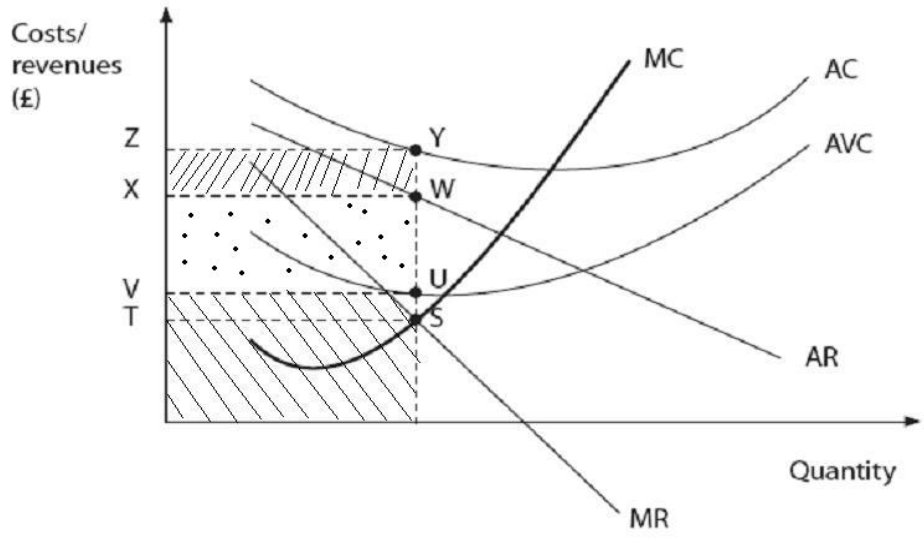
January 2011

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If the incorrect key has been chosen, the explanation is unlikely to score more than **two** marks. The exception is where the key is not written, or not written clearly.
Incorrect options can be knocked out, but the letter of the knocked out key must be given, along with relevant economic reasoning. If more than one key is knocked out for the same reason, this will earn one mark. Up to two knock out marks can be awarded for each Supported Choice Question.

Question Number	Answer	Mark
1	**B** Definition of monopoly power (either legal definition 25%, or 100% of market share), or dominance, market power is high, one seller in the market **(1 mark)** Role of the Competition Commission (e.g. to increase the level of competition) **(1 mark)** Application e.g. airlines buying slots at airports **(1 mark)** Adverse effects on airlines **(1 mark)** and therefore on consumers **(1 mark)** and/or competition (higher prices, less choice, reduced consumer surplus) **(1 mark)** Benefits of the decision, e.g. on consumers (lower prices), the level of competition **(1 mark) or** contestability **(1 mark)** increased efficiency **(1 mark)**	**(4)**

Question Number	Answer	Mark
2	**D**  	**(4)**

	MC=MR is the objective of the firm **(1 mark)** Identification that the firm is a loss minimising firm OR it is making a loss OR AC>AR **(1 mark)** which may be shown ZYWX **(1 mark)** The firm is covering its average variable costs **(1 mark)** which may be shaded **(1 mark)** For an answer that shows area XWUV shaded or otherwise indicated **(1 mark)** as the **contribution** towards fixed costs, or other explanation that it will reduce the fixed costs, which have to be paid anyway **(1 mark)** In the long run all costs are variable or other description of long run impact (can't just repeat the key which refers to the long run), for example if nothing changes in the long run the firm would go out of business, or AC = AR **(1 mark)**	

Question Number	Answer	Mark
3	**C** Identification of revenue maximisation as MR=0 or diagram showing MR crossing horizontal axis **(1 mark)** Diagram showing TR max at MR = 0 **(1 mark)** The flowers are going to be discarded the cost is effectively zero **(1 mark)** The firm makes as much money as possible ignoring the costs since the costs are no longer recoverable **(1 mark)** If flowers are sold there is additional revenue or if flowers are not sold revenue from them is zero **(1 mark)** Therefore by selling flowers that would otherwise be discarded, profits are made or losses reduced. **(1 mark)** Demand is relatively elastic **(1 mark)** Reference to second-degree price discrimation is allowed (but not required for this specification) **(1 mark)** It will cost money to dispose of wasted stock **(1 mark)** Alternative approach: the firm is profit maximising **(1 mark)**, but MC = 0 **(1 mark)**, and if MC = MR then MR = 0 **(1 mark).**	**(4)**

Question Number	Answer	Mark
4	**D** Definition of profit: difference between revenues and costs, AR>AC, or profit above normal profit, or reward to entrepreneur (normal profit) **(1 mark)** Alternatively the definition of profit can be awarded for the accurate labelling of a diagram showing AR>AC. Costs have fallen **(1 mark)** more than revenue has fallen or more than 4% **(1 mark)** **OR** a diagram showing revenue falling **(1 mark)** or costs falling AC and MC or just AC **(1 mark)** and new larger profit area **(1 mark)** Increased workloads **(1 mark)** and/or mechanisation/investment in technology **(1 mark)** has increased output per postal worker and/or productivity or efficiency **(1 mark)**	**(4)**

Question Number	Answer	Mark
5	**E** Role of Ofwat, e.g. to promote consumer interests or promote competition **(1 mark)** Private utilities are natural monopolies in local markets **(1 mark)** Cutting the permitted price increase is a price cap, e.g. RPI - X **(1 mark)** RPI – X + K allows for investment in the water industry **(1 mark)** Powers of Ofwat, e.g levy fines **(1 mark)** Increased investment is likely to make the firms more efficient (cut costs); this may be shown by a falling costs diagram **(1 mark)** Consumer welfare improves, e.g. better quality service or reduced water loss **(1 mark)** Producer profits fall if inefficiency continues, or firm has to cut costs to maintain profitability **(1 mark)**	**(4)**

Question Number	Answer	Mark
6	**E** Definition of market share **(1 mark)** (e.g. percentage of market sales controlled by a firm) Role of the European Competition Commission or competition authorities generally, to promote competition **(1 mark)** Calculation of concentration ratio, e.g. 2 firm 90.4%, 3 firm 94.7% etc, or comment that IE has a legal monopoly with 62% of the market **(1 mark)**	

	Increased contestability, or reduced barriers to entry e.g. removing the pre-installation of the software will mean that more firms will be able to enter the market **(1 mark)** Existing firms will be able to increase their market share/greater competition **(1 mark)** Benefits to consumer, e.g. increased speed of browser, more choice **(1 mark)** Comment on the magnitude of the fine, to show the estimated impact of the damage to the market **(1 mark)**	**(4)**

Question Number	Answer	Mark
7	**D** Tacit collusion definition, e.g. that firms co-operate but not formally, or price leadership, or quiet or implied co-operation, secret, unspoken **(1 mark)** Explanation that oligopoly involves interdependence or other characteristics, e.g. a few firms dominate the market. **(1 mark)** Game theory: workable pay-off matrix **(1 mark)** initially with increased prices **(1 mark)** may be used to explain short term gains, e.g. one firm makes profit at the expense of another **(1 mark)** but long term further adjustment, or other use of prisoners' dilemma e.g. both have low prices, collusion breaks down, or Nash equilibrium **(1 mark)** n.b. Nash equilibrium is not required for full marks Alternative approach: Kinked-demand curve analysis or price leadership may be used **(up to 3 marks**, of which, 1 mark for diagram, 1 mark for impact of increased prices described, 1 mark for impact of decreased prices described**)**	**(4)**

Question Number	Answer	Mark
8	**E** PFI or PPPs defined as a **means of obtaining** private funds for public sector projects **(1 mark)** Use of data or other knowledge that prices charged are often high **(1 mark)** Identification of reasons for higher prices (e.g. lack of competitive tendering, extortion by owners of finance) **(1 mark)** Reasons why government continues with PFI despite costs, e.g.: • Enables projects e.g. hospitals/schools to be built earlier or at all than would otherwise be possible. **(1 mark)** • Private sector might be seen to be more efficient than public sector **(1 mark);** • defers payments for expensive projects **(1 mark)** • by paying rents or by leasing **(1 mark)** • lowering borrowing costs **(1 mark)** • consideration of opportunity cost, e.g. the government's money can be used for other things **(1 mark)**	

	Example of knock-out mark: Not A because it is hard to predict future costs for major public sector investment projects because there are unknown costs **(1 mark)**	**(4)**

Question Number	Answer	Mark
9(a)	**Theory (2 marks):** identification that this is horizontal (1 mark) with explanation that the firms are at the same stage of the production process (1 mark) gaining economies of scale/combined market share (1 mark) **Application (2 marks):** that they both offer commercial flights (1 marks); application of economies of scale e.g. cut overlapping routes (1 mark); can combine office functions (1 mark); increased buying power when buying planes (1 mark); 'national flag carriers' Ext 1 lines 14-16 (1 mark) with associated landing rights (1 mark), substantial cost savings (1 mark).	**(4)**

Question Number	Answer	Mark
9(b)	KAA: 4 marks Award 2 reasons (1+1). Award a maximum of 2 marks for the reasons – a diagram is required in question Costs have risen: e.g. rising fuel costs, wage costs, Iberia has become x-inefficient, other cost issues Demand has fallen: e.g. fall in demand due to financial crisis, recession, and other confidence issues, other airlines scooping up the market. Diagram (up to 2 marks): showing leftward shift in AR and MR (1 mark) and new equilibrium MC=MR and sub-normal profit (i.e. loss) (1 mark) **or** rising costs (AC and/or MC rises)**(1 mark)** n.b. cost diagram does not need to show a shift in MC and new equilibrium MC=MR and sub-normal profit (i.e. loss) (1 mark) Diagram does not need to show a profit before the shift. NB these sketches are not intended to be fully labelled diagrams,	

Question Number	Answer	Mark
9(c)	KAA 6 marks, award up to 3 factors (2 x 3 marks or 3 x 2 marks or 3 + 2 + 1) Can be argued for increased or decreased contestability. Definition of contestability (may be implicit) e.g. low or no sunk costs, low or no barriers to entry/exit (1 mark) with application that this causes barriers to entry or exit for new firms (limit pricing might occur); use of data to support argument that markets will be less contestable. Factors suggesting lower contestability might include: • Increased barriers to entry and exit • Firm can cross-subsidise routes and effectively use a limit price strategy in contestable markets • Economies of scale (can be developed as separate points) • Concentration ratio might increase • Increased market power • Price fixing or collusion might be more likely • After the merger there will be more profits which is a sign of decreased contestability Evaluation: Award up to 6 marks (2x3 or 3x2 marks) • Counterargument: Can be argued for increased or decreased contestability • Barriers to entry might be the only way that companies can survive, so in the long run are beneficial to consumers and stops the market becoming even more concentrated • Suppliers have monopoly power, so bilateral powers are levelled out • Depends on the degree of monopsony – might strangle suppliers • Many agreements against the law if they are anti-competitive • Will make little difference as airline industry was highly incontestable before the merger? • EU powerless in global market (Ext 1 lines 34 – 35) • Lack of profitability suggests that the industry is contestable • Low cost and emerging economies' airlines are entering, which is a sign of high contestability • With the strikes (Extract 2) brand loyalty might diminish, and consumers might be more willing	**(12)**

	to shift • Diseconomies of scale/lack of synergies might mean new entrants find it easier to compete • Ext 1 Line 30 More landing slots might become available, increasing contestability • Other things are not equal. Contestability might change for other reason, e.g. internet bookings, more planes available to lease	

Question Number	Answer	Mark
9(d)	KAA: 8 marks, award as (2x4 or 4x2 marks or 3+2+2+1 etc). Award up to four points. Benefits might include: • Economies of scale (more than one can count as separate points) • Increased market share • Rationalisation: 'within five years the new group will save some €400m ($595m) a year by cutting overlapping routes, and by combining maintenance, office functions and business-class lounges. • Benefits to consumers e.g. consolidation means fewer strikes/airlines going out of business, which is better for the consumer in the short run (don't get holidays cancelled) and long run (more choice, competitiveness, better service) • Could protect and even create jobs • Benefits to the government in terms of tax revenue and spending • Increased buying power, or monopsony power, enabling purchasing economies of scale. The pair may also have more buying power when it comes to negotiations to buy new planes from Boeing and Airbus' • Merger will provide finance for investment, e.g., in environmentally friendly technology • Benefits to shareholders – increased market capitalisation and dividends Evaluation (costs): 8 marks (2x4 marks or 4x2 marks or 3+2+2+1 etc). Points might include: • De-industrialisation problems, unemployment, • Less choice and/or higher prices for consumers; fall in consumer surplus • Higher risk and/or prices for consumers; fall in consumer surplus • Higher risk for firm/over-specialisation ('all the eggs in one basket') • Diseconomies of scale • Clash of cultures, and/or loss of synergy	**(16)**

	• Costs of redundancies • Lower morale of workers • Marketing problems • Allow other forms evaluation, e.g. short/long run distinction • Risk of investigation by competition authorities • Legal, admin and negative publicity costs should the merger fail to go through • Other airlines might retaliate by merging • Loss of benefits of specialisation in domestic markets.	

Question Number	Answer	Mark
10(a)	Award 1 reason (2 marks) • Increased availability and quality of substitutes, e.g. internet news providers or free newspapers (1 mark) which are cheaper (1 mark) • Credit crisis (from 2007), recession from 2008 • Allow reasons for slowing rate of fall or even rise (FT sales 2005-09) e.g. fears about the economy make people want to buy newspapers • Fewer bulk purchases by train/flight operators and hotels Application (2 marks) • Falling trend (or rising trend for FT) 1 mark • Use of data to explain trends, up to 1+1 • More people check their news online – must give reference to (Extract 2) • Readers are disloyal • Use of FT figures as bucking the trend, using observations from data, up to 1 + 1	**(4)**

Question Number	Answer	Mark
10(b)	KAA: 4 marks (4 + 0 marks) or (2 + 2 marks) or (3 + 1 marks). KAA for they will leave (can be argued the opposite way around) • If firms do not make a profit (i.e. if demand is falling) they will go out of business in the long run • Price (AR) must cover AVC or AC in the long run • Diagram (up to 2 marks): showing leftward shift in AR and MR (1 mark) and price below AVC (i.e. shut down price) (1 mark) • New technology makes printed matter obsolete which means eventually they will shut down • Declining advertising revenues increase the likelihood of shut-down, Extract 1 lines 7-8 – online advertising is cheaper and more effective • Use of Figure 1 to support disloyalty argument Evaluation: 4 marks (4 + 0 marks) or (2 + 2 marks) or (3 + 1 marks) Evaluation marks are awarded for saying firms will stay in business (or counterargument to the above) AND other evaluative comments. Points might include: • Newspaper sales are not the only form of income for the firms. Many newspapers are profitable even with a free cover price – other revenue streams are more important e.g. apps, advertising revenue is likely to increase as adverts can be targeted to readers' profiles (Ext 1 line 8) • If firms can cover AVCs then they may stay in business and try to drive down costs • Market is fairly contestable (low sunk costs) and other firms may enter the market to provide services • If firms can survive the downturn, AR is likely to rise in a recovery and the firm will return to profit • Some newspapers are part of a conglomerate, so losses can be cross-subsidised, e.g. by SKY Sports, and the firms stay in business • Diagram (up to 2 marks): showing leftward shift in AR and MR (1 mark) and price above AVC (i.e. they do NOT shut down in the short	**(8)**

	run) (1 mark) • Insufficient data provided to make a judgement • Depends whether they can cut costs • Depends whether they can increase market share • Depends whether the trend is long run – if this continues the firm will shut down • Unlikely in that '24' hour news is likely to reduce demand for newspapers as newspapers offer depth of insight and evaluative comment • Some people cannot or do not want to access other forms of news so the market will remain in the long term • Extent of competition • Depends on the costs of exit	

Question Number	Answer	Mark
10(c)	KAA: 6 marks (2x3 marks or 3x2 marks) or (3 + 2 + 1) KAA might be argued for or against a difference in contestability Definition of contestability (may be implicit) e.g. low or no sunk costs, low or no barriers to entry/exit (1 mark) Points might include: • Online news is a highly competitive market with a high level of contestability. Brand loyalty is low. Use of data in Fig 1 to support argument. • Online news has low sunk costs, easy to set up. • Print set up costs are high, needing high levels of equipment • Print edition news is less contestable. Use of Figure 2 for evidence of concentration. • Comment on related demand for advertising: advertisers have more choice about where to place the online adverts (higher price elasticity of demand) and they view customers of the newspapers as being more disloyal online so the expected returns are lower. • Lack of profitability suggests that the industry is contestable • There may be more hit-and-run in the online market **If the answer is referring to only one kind of market for news or for newspapers in general, then cap KAA at 4/6 marks** Evaluation: 6 marks (2 x 3 marks or 3 x 2 marks or 3+2+1). Points might include: • Counterarguments to above points, e.g. that there is **not** a significant difference in contestability. • Online set up costs are in fact very high • Printing set up costs might be low e.g. because the technology already exists • Contestability of both markets increasing as internet is used more widely for reading news (also 24 hour TV news) • Some newspapers are starting to charge for or	**(12)**

	limit online news (Google and Times) but we do not yet know impact on demand (Fig 2 and own knowledge) • Increased contestability may worsen the quality of news reporting – negative impact will be wider than just on the firms • Newspapers have become more contestable particularly local newspapers, as a result of new technology. • Fig 1 shows BBC dominance, therefore online news is not contestable • Websites might seem contestable but they are not, because of network effects of readers and path-dependency of search engines	

Question Number	Answer	Mark
10(d)	KAA 8 marks award as (4x2 or 3+2+2+1) Award up to four strategies Allow any valid price strategies IF LINKED TO INCREASED PROFITABILITY albeit in the long run: • Limit pricing if linked to increased profitability • Revenue maximisation/sales max can only be awarded if linked to increased profitability, e.g. in the long run **Do not award identification marks for the above unless linked to profitability, because the strategies aim to lower profits.** • Predatory pricing • Collusion/price wars • Other game theory pricing strategies • Price discrimination • Cost-plus pricing • Penetration pricing • Allow profit maximisation as a pricing strategy Allow any valid non price strategies • Marketing/advertising e.g. celebrity endorsement (may be awarded as more than one factor) • Improved service e.g. delivery networks • Customer interface and apps • Mergers and acquisitions • Product re-design • Loyalty schemes • Free gifts • Other game theory non-pricing strategies • Lowering costs/increasing efficiency	**(16)**

	If only one type of strategy then award a maximum of 6/8 marks Evaluation 8 marks. Award as (4x2 marks or 2x4 marks or 3+2+2+1 etc). Factors might include: • The Times is already charging for use of articles and is a success/is not a success • It is too early to say, certainly with The Times. • Difficult to know outcomes in game theory, or other game theory critique, e.g. kinked demand curve to show sticky prices • Award game theory responses as more than one point, e.g. price war • Depends on changing income in a recession • Global competition issues • Discussion of relative merits of pricing and non-pricing strategies • Possible intervention by the Competition Authorities • Costs involved in redesigning and marketing the non-price strategies might outweigh benefits • Advertising as a **sunk** cost	

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Edexcel GCE

Economics

Advanced
Unit 3: Business Economics and Economic Efficiency

Wednesday 23 June 2010 – Morning
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** 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.

Turn over ▶

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M 3 6 9 8 9 A 0 1 2 8

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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 use diagrams in your answers.

1 Intel is the world's largest microchip manufacturer, supplying over 75% of the market. In May 2009 it was fined $1.44bn by the European Commission. It claimed that Intel gave secret payments to computer makers to use only Intel chips and paid a major retailer to stock only computers with its microchips. The most likely justification for this fine is that:

(1)

A it ensured Intel would make a loss

B the market for microchips is contestable

C it would increase Intel's producer surplus

D Intel was abusing its market power

E the market for microchips has a low concentration ratio.

Answer ☐

Explanation

(3)

(Total for Question 1 = 4 marks)

M 3 6 9 8 9 A 0 2 2 8

2 In May 2009, British Airways (BA) quoted the following prices for a flight from London to Toronto, Canada:

Date of flight	Price
1 August 2009	£407
1 October 2009	£204

Source: www.britishairways.com/travel/fx/public/en

The most likely explanation of this pricing strategy is:

(1)

A more spare capacity on BA's planes on 1 August 2009

B higher costs of flying planes in October than in August

C that there is a difference in price elasticity of demand in August and October

D the expectation that some airlines will go bankrupt between August and October 2009

E an expectation that the world recession will be over by October 2009.

Answer ☐

Explanation

(3)

(Total for Question 2 = 4 marks)

S T E M U P . C O . U K

3 Amtrak is the sole provider of long-distance rail passenger travel in the US. The most likely reason why Amtrak has no competition is that:

(1)

A sunk costs are low

B there are falling long run average costs in the US rail passenger industry

C demand for rail travel is increasing

D x-inefficiency is high

E consumers' surplus is always higher when there is a sole provider of a product or service.

Answer ☐

Explanation

(3)

(Total for Question 3 = 4 marks)

M 3 6 9 8 9 A 0 4 2 8

S T E M U P . C O . U K

4 A firm engaged in 'satisficing' behaviour is most likely to:

(1)

A maximise profits

B maximise revenue

C maximise sales

D minimise costs

E produce at an output different to that of a profit maximising firm.

Answer ☐

Explanation

(3)

(Total for Question 4 = 4 marks)

S T E M U P . C O . U K

5 A firm might aim to maximise sales rather than profits in the short run because:

(1)

A it knows its marginal cost and marginal revenue

B it is in a market with no other competitors

C it wishes to deter the entry of new firms

D supplies of raw materials are limited

E there are substantial barriers to entry in this industry.

Answer ☐

Explanation

(3)

(Total for Question 5 = 4 marks)

M 3 6 9 8 9 A 0 6 2 8

S T E M U P . C O . U K

6

Year (July)	Making a call (€ per minute)	Receiving a call (€ per minute)
2009	0.46	0.22
2010	0.43	0.19
2011	0.34	0.11

Source: *The Guardian*, 'EC wants price caps to prevent mobile phone bill shock', 24 September 2008

The table shows the maximum prices for making and receiving mobile phone calls permitted by the European Competition Commission. The most likely reason for these price caps is that the Commission believes that in this industry:

(1)

A contestability is too high

B excessive profits are being made

C consumer surplus is too high

D it is unnecessary to intervene since sufficient price competition exists between mobile phone companies

E investment needs to be encouraged.

Answer ☐

Explanation

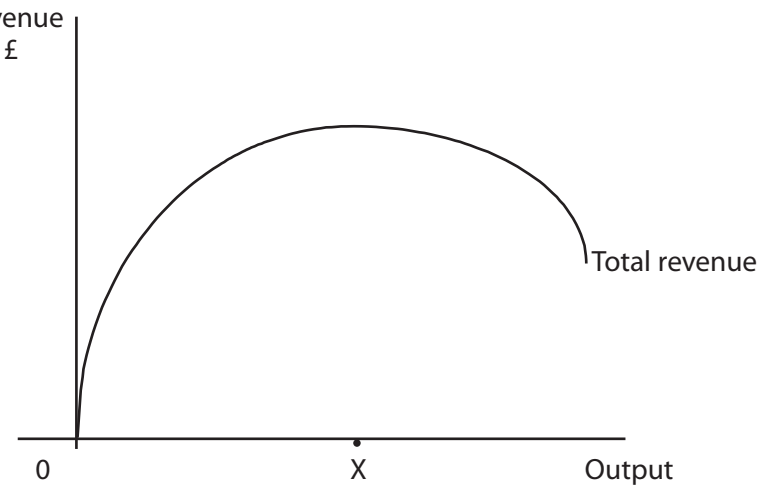
(3)

(Total for Question 6 = 4 marks)

M 3 6 9 8 9 A 0 7 2 8

S T E M U P . C O . U K

7



The diagram shows the total revenue curve of a firm. It can be deduced that:

(1)

A average revenue and marginal revenue will be upward sloping as output increases

B average revenue will be equal to marginal revenue as output increases

C average cost will be falling as output increases

D the firm will be making maximum profit at output 0X

E average revenue and marginal revenue will both be falling as output increases.

Answer ☐

Explanation

(3)

(Total for Question 7 = 4 marks)

M 3 6 9 8 9 A 0 8 2 8

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8 A profit-maximising firm will produce at the productively and allocatively efficient level of output in which of the following market conditions?

(1)

A Perfect competition in the long run

B Monopoly

C Perfect competition in the short run

D Monopolistic competition in the long run

E Oligopoly.

Answer ☐

Explanation

(3)

(Total for Question 8 = 4 marks)

TOTAL FOR SECTION A: 32 MARKS

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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 18.

You should spend 55 minutes on this section.

9 The German Electricity Market

Extract 1 Electricity prices in Germany

On 22 April 2009, just days after Germany's competition regulator said it had started an investigation into electricity generating companies, RWE, Germany's second largest electricity generating company, predicted that its profits are likely to go up in 2010 and 2011. The regulator is trying to work out why energy prices in Germany are high, and in some cases rising, even though oil and gas prices have fallen sharply. It suspects electricity generating companies may have been keeping prices artificially high by, for instance, shutting power stations simultaneously to limit supplies. Finding evidence of anti-competitive behaviour may be difficult, and proving it even more so. However, it will be clear to the regulator that Germany's electricity market is not working efficiently. An attempt to liberalise the market over the past decade seems only to have worsened many of its problems.

The first sign that the market is not working is in Germany's electricity prices, which are among the highest in Europe, even though it has an abundance of cheap coal. Moreover, Germany's electricity prices have remained persistently high even at a time when they would be expected to fall. Analysts at Credit Suisse, an investment bank, estimate that the slowing economy should reduce electricity demand by about 5%. Coal prices have dropped by 50% from 2008. Yet there is little sign that either falling demand or lower input costs are leading to cheaper electricity.

The main reason Germany's electricity market is not working well is the lack of competition. The biggest four electricity generating companies in Germany produce more than 80% of its electricity. The top two, E.ON and RWE, produce more than 60%. Liberalisation has, if anything, reduced competition. Germany had eight big generating companies in 1997, but that number has since fallen to four because of mergers and acquisitions.

A second problem is that Germany's biggest electricity generating companies also own the networks that distribute electricity. Critics argue that this gives them a huge advantage over smaller electricity generating companies, which may struggle to gain fair access to the networks or market information.

Change is, however, coming for two reasons. The first is that regulators in Germany have come to realise that the electricity market is not competitive. They have the power to impose very heavy fines for anti-competitive practices. The European Commission is also having some success in forcing firms to sell off their distribution networks. For example, at the end of 2008, E.ON agreed to sell its long-distance distribution network after being investigated by the European Commission.

S T E M U P . C O . U K

Over the long run, there are ambitious plans to increase the share of electricity from renewable sources, which have high start-up costs. This may reduce the dominance of the country's four biggest electricity generating companies. Germany hopes to get as much as 30% of its electricity from renewable sources by 2020. However, despite increased competition from renewable energy providers, Germany's electricity prices are likely to keep on rising.

Source: The Economist, 25 April 2009 'Power to the people (at a price)'

(a) Briefly explain the form of integration described in lines 25–26.

(4)

(b) Assess the evidence that the electricity generating companies in Germany are operating as a cartel.

(8)

*(c) Apart from operating as a cartel, discuss the ways in which firms might compete in the German electricity generating market. Refer to game theory in your answer.

(12)

*(d) With reference to the last two paragraphs, evaluate the factors which might reduce the profits of Germany's electricity generating companies.

(16)

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(a) Briefly explain the form of integration described in lines 25–26.

(4)

M 3 6 9 8 9 A 0 1 2 2 8

(b) Assess the evidence that the electricity generating companies in Germany are operating as a cartel.

(8)

S T E M U P . C O . U K

*(c) Apart from operating as a cartel, discuss the ways in which firms might compete in the German electricity generating market. Refer to game theory in your answer.

(12)

M 3 6 9 8 9 A 0 1 4 2 8

S T E M U B . C O . U K

*(d) With reference to the last two paragraphs, evaluate the factors which might reduce the profits of Germany's electricity generating companies.

(16)

M 3 6 9 8 9 A 0 1 6 2 8

S T E M U P . C O . U K

(Total for Question 9 = 40 marks)

M 3 6 9 8 9 A 0 1 8 2 8

S T E M U P . C O . U K

If you answer question 10 put a cross in this box ☒.

10 The market for instant coffee

Figure 1: UK Instant coffee market shares, 2007–8

Coffee brand	Market share (%)
Nescafé	**51**
of which Nescafé original	25
Nescafé Gold Blend	13
other Nescafé	10
Nescafé Decaffeinated	3
Kenco	**17**
of which other Kenco	6
Kenco Really Smooth	4
Kenco Really Rich	4
Kenco Decaffeinated	3
Douwe Egberts	**5**
Carte Noire	**3**
Others (including supermarket own label brands)	**24**

Source: http://www.brandrepublic.com/InDepth/Features/790070-Insight-Coffee---Inst

Extract 1 Changing Tastes

The rise of the coffee shop has brought urban café culture to the UK. While consumers are connoisseurs of brewed and filter coffee on the high street, they are, however, opting for convenience at home, where instant coffee still dominates.

Amongst instant coffees, there is a growing willingness among consumers to trade up to premium and speciality varieties. Growing awareness of health, wellbeing and ethical trading are also affecting consumers' purchasing decisions, and, therefore, the market.

Instant coffee accounts for more than 80% of the total UK market for coffee. Nescafé leads the field, and last year announced a £17 million promotional investment in its instant range.

Source: Ahttp://www.brandrepublic.com/InDepth/Features/790070-Insight-Coffee---Inst

Extract 2 Can instant coffee give Starbucks a boost?

In the US, instant coffee is regarded as being cheap and tasteless. The global instant coffee market is worth $17.7 billion, just $700 million of which is sold in America. Instead, Americans drink brewed and filter coffee – 65 billion cups of it a year.

Starbucks, best known as 'the home of the $4 latte', is gambling its luxury image by entering the instant coffee market with a new brand called Via, which can be sold through supermarkets and other outlets. At first, Via will come in packets of twelve individual servings, costing less than $1 per cup. This is much more than other instant coffees, but much less than a cup of coffee at one of Starbucks' cafés. As John Quelch, a Harvard Business school professor said: "Instant, soluble coffee has long been an unspeakable wasteland. Conventional wisdom would be that no premium brand should go near it".

But Howard Shultz, the chief executive of Starbucks, believes that with a superior instant coffee, he can take a share of the consumers who currently drink brewed and filter coffee at home. Starbucks says it has patents that should prevent competitors from quickly copying Via, which will go on sale in the US in June 2009. The opportunity may, however, be biggest in other countries: in the UK over 80% of the coffee sold is instant, compared with just 10% in America.

Mr Shultz insisted that the Via instant coffee brand was an innovation Starbucks had been working on for almost 20 years. It was just fortunate that the creation was perfected in time for the economic downturn. However, Starbucks also faces increased competition. For example, McDonald's is heavily promoting its McCafé espresso-based drinks.

(Source: Adapted from *The Times Online*, 17 February 2009 (http://business.timesonline.co.uk/tol/business/industry) and *The Economist*, 21st February 2009.

(a) Briefly explain the market structure which best describes the UK instant coffee market.

(4)

*(b) Assess the likely reasons why Starbucks is charging a lower price for Via instant coffee than for filter coffee sold in its cafés.

(12)

(c) To what extent is the UK market for instant coffee contestable?

(8)

*(d) Assess the methods by which the manufacturers of instant coffee might compete with each other in both the UK and the US.

(16)

M 3 6 9 8 9 A 0 2 0 2 8

(a) Briefly explain the market structure which best describes the UK instant coffee market.

(4)

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(12)

M 3 6 9 8 9 A 0 2 2 2 8

(c) To what extent is the UK market for instant coffee contestable?

(8)

M 3 6 9 8 9 A 0 2 4 2 8

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*(d) Assess the methods by which the manufacturers of instant coffee might compete with each other in both the UK and the US.

(16)

M 3 6 9 8 9 A 0 2 6 2 8

S T E M U P . C O . U K

(Total for Question 10 = 40 marks)

TOTAL FOR SECTION B: 40 MARKS
TOTAL FOR PAPER: 72 MARKS

M 3 6 9 8 9 A 0 2 8 2 8

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Summer 2010

GCE

GCE ECONOMICS (6EC03) Paper 01

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Summer 2010

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General Observations
Up to 2 marks can be awarded for knocking out incorrect options, if a valid reason is given, with one mark for each. The letter of the excluded option must be given.
If the letter option chosen is incorrect there is a maximum of 2 marks for explanation, except in cirmcumstances which make it clear the candidate made a clerical error.

Question Number	Answer	Mark
1	D Marks may be awarded for • Role of European Commission, e.g. promotes competition, acts as a surrogate for competition • Improving the interest of consumers • Data ref e.g. 75% is a monopoly, or Intel has reduced competition (1 mark) • Intel engaged in anti-competitive practices (1 mark) • Explanation that these practices limit competition (1 mark) • Intel has considerable degree of monopoly power and can, therefore, use this to undermine competitors e.g. collusion (1 mark) • Fine aimed as a deterrent or punishment to other companies from adopting such practices, or other effect on other firms (1 mark)	(4)

Question Number	Answer	Mark
2	C • Definition of price elasticity of demand or formula e.g. $\%\Delta Q_D/\%\Delta P$ (1) • Demand less elastic in August (1 mark) and more elastic October (1 mark) which may be shown on a diagram • Observation that there is price discrimination (1 mark) with further development or diagram (1 mark) Explanation marks are limited to 1 of the 3 marks if August is seen as more elastic than October	(4)

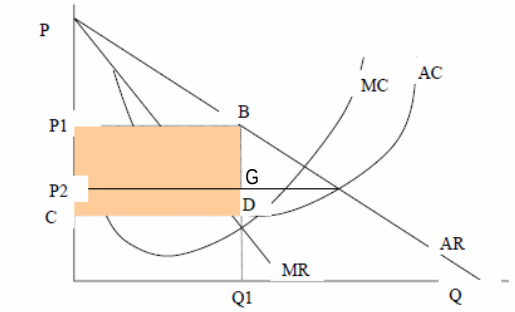
Question Number	Answer	Mark
3	B • Recognition of economies of scale (1 mark) • Diagram showing falling long run average cost curve as output increases (1 mark) • Type of economies of scale e.g. technical	

	economies of scale; managerial, marketing (1 mark) • Example of economy of scale as application e.g. high sunk or capital costs of rolling stock(1 mark) • Recognition of natural monopoly (1 mark) • Barriers to entry/exit (1 mark)	(4)

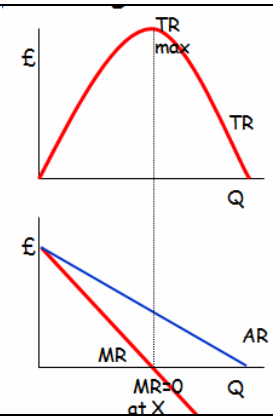
Question Number	Answer	Mark
4	E • Definition of satisficing, e.g. satisfying or sufficing different stakeholders, making just enough profit to survive, making enough profits to keep shareholders happy, firms have multiple and possibly conflicting interests (1 mark) • Identify stakeholder and/or an objective (1 mark) • Reason for stakeholder's objectives e.g. shareholder wants to maximise profits because their dividends depend of them (1 mark) • Diagrammatic analysis: costs/revenue diagram showing at least two objectives of firms, or profit diagram showing a satisficing range of profit (1 mark)	(4)

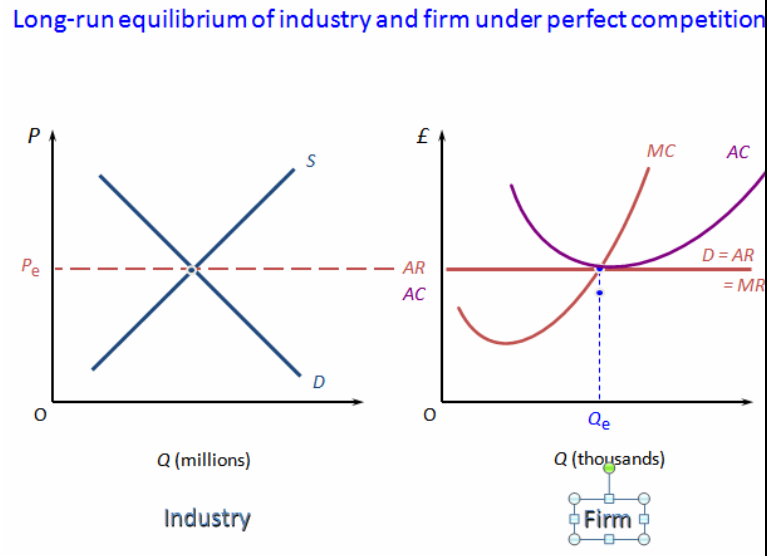
Question Number	Answer	Mark
5	C • Definition: sales maximisation is at output at which AR = AC which may be in diagrammatic form (1 mark) • Diagram showing outputs or prices for equilibria (1 mark) • Explanation that under sales maximisation lower prices or profits will deter new entrants or increase market share of the existing firm (1 mark) • Normal profits only will be earned (1 mark) • Accept analysis of limit pricing (1 mark) • Long run analysis e.g. sales max might equal long run profit max (1 mark)	(4)

Question Number	Answer	Mark
6	B • Role European Commission, to promote competition, surrogate for competition or	

	protect consumer interests • Abnormal profit identified related to monopoly/oligopoly power • Understanding of 'price caps' e.g. lower prices enforced, allow RPI-X (1 mark) • Analysis based on lack of competition in the market (1 mark) • Explanation of impact on consumer e.g. exploitation (1 mark) • Application of data (1 mark) e.g. caps are tightening • Monopoly diagram showing impact on profits of price cap: showing the price cap P2 (1 mark) and impact on profit area or efficiency changes P1BDC to P2GDC (1 mark) 	(4)

Question Number	Answer	Mark
7	E • Definition of AR or MR or formula AR = TR/Q MR = ΔTR/ΔQ (1 mark) • Annotation of diagram or additional diagram to show falling AR and MR (1 mark) • Diagram link X to MR=0 (or verbally) (1 mark) • Imperfect competition or price maker (1 mark) • Explanation of why AR and MR slope downwards e.g. if a firm wants to sell more it must cut prices (1 mark) • Reference to price elasticity of demand elastic up to X then inelastic (1 mark) • Algebraic explanation showing relationship between TR, AR and MR (up to 3 marks)	(4)

Question Number	Answer	Mark
8	A • Definition of profit maximisation MC=MR • Explanation of productive efficiency (lowest point on average cost curve) (1 mark) NB definitions are not sufficient for this mark. There must be some explanation • Explanation of allocative efficiency (P=MC) (1 mark) • Explanation of firms entering/leaving industry in long run, with no barriers to entry or exit (up to 3 marks) • Diagram illustrating long run equilibrium of a perfectly competitive firm (1 mark for horizontal AR, 1 mark for tangential AC) 	(4)

Question Number	Answer	Mark
9(a)	Theory 2 marks: identification that this is forward (1 mark) e.g nearer the customer/market or downstream,	

	vertical integration (1 mark) e.g. same industry but different stages of production Application of vertical integration 2 marks: e.g. generating companies own networks that distribute electricity from Line 25, (1 mark) with explanation that the distributors are nearer the customers (1 mark)	(4)

Question Number	Answer	Mark
9(b)	KAA 4 marks Answers must be based on evidence of a cartel. Do not award reasons why there is a cartel, or why cartels might break down as analysis points. Meaning of cartel e.g. an agreement between firms to operate together (1 mark) Evidence (up to 4 marks). Award as 4 or 1+3 or 2+2 or or 2+1 or 1+1. Evidence might include: • Germany has 'highest prices in Europe' • Profits expected to rise despite recession • Price rising even though cost of coal has halved (line 17), and gas and oil prices have fallen sharply (line 5) • Demand for electricity expected to fall by 5% but prices are high and in some cases rising (lines 4-5) • Suggestion that power stations being shut to cut supply • Two companies (E.ON & RWE) dominate the industry. Award use of concentration ratios in lines 20-22 • Reference to European Competition Commission (ECC) as a sign of acting as a cartel (Award no more than 4 KAA marks) Evaluation 4 marks (4+0 or 3+1 or 2+2) might include: • It may be just tacit or informal collusion • Prioritisation with justification • Missing information – 'finding evidence of anti-competitive behaviour may be difficult' • Risks of collusion e.g. fines by the European Competition Commission might be greater or less than potential gains. This might involve game theory or regulatory capture. Cartels are illegal	(8)

	• Prices are high for other reasons, e.g. x-inefficiency, or other costs such as wage costs, or owing to reinvestment • Concentration ratio or prices are high for reasons other than the operation of a cartel, e.g. a natural monopoly	

Question Number	Answer	Mark
9(c)	KAA 6 marks (of which 2 marks are reserved for game theory). If no reference to game theory there is a maximum of 4 KAA Award 6 KAA marks for good game theory which illustrates various ways to compete Consideration of game theory: • Explanation of strategies and best solution • Tacit agreements such as price fixing • Pay-off matrix • Kinked demand theory • Recognition of rival behaviour and interdependence • Prisoners' dilemma • Informal collusion • A pay-off matrix drawn accurately and applied to RWE and E.ON 2 marks Methods of competition include: Price competition • Limit pricing • Predatory pricing • Sales maximisation Non-price competition • networks to distribute electricity, • advertising, • marketing; • special discounts to other distributing companies • Mergers, collusion or other ways to remove competition can be seen as a way to compete Award best three points e.g. 4+2 or 3+2+1 or 2 + 2 + 2 Do not award 'operating as a cartel', e.g. controlling	(12)

		networks, or simultaneously shutting power stations lines 6-7. Evaluation 6 marks. Award best three points, e.g. 3+3 or 3+2+1 or 2+2+2 etc. • Regulator forcing companies to change their behaviour • Difficulty of using non-price competition when product is homogeneous • Critical assessment of game theory e.g. game theory leads to lack of competition not a way to compete • Critical assessment of the method of competition • Game theory shows that the worst outcome might be reached as illustrated by problems of Prisoners' Dilemma or price war • What looks like competition might be the emergence of monopoly power, e.g. duopoly pricing • Other critical assessment of game theory, e.g. lack of rationality, lack of information for consumers • How credible is the threat? e.g. predatory pricing might not be effective, or there may be international competition making limit pricing ineffective • Collusion is illegal • Gains from collusion might outweigh the possible fines • Collusion is difficult to prove, or other missing information Quality of written communication will be assessed in this question based on the candidate's ability: • To present an argument and conclude on the basis of that argument • To organise information clearly and coherently • To use economics vocabulary appropriately • To use grammar, spelling and punctuation appropriately	

Level	Mark	Descriptor
Level 1	1-3	Definition of game theory (1 mark); application - to 2 companies E.ON & RWE (2 marks)
Level 2	4-7	Definition of game theory (1 mark); application - to 2 companies E.ON & RWE (2 marks); other methods of competition (up to 3 marks); brief evaluation (1 mark)
Level 3	8-12	Definition of game theory (1 mark); application - to 2

		companies E.ON & RWE (2 marks); other methods of competition (up to 3 marks); Evaluation: 2 x 3 marks or 3 x 2 marks (6 marks);

Question Number	Answer	Mark
9(d)	KAA 8 marks Award up to 4 points: (3 + 3 + 2) or (4 + 4) or (2 + 2 + 2 + 2) marks or similar. Policies and factors include: • Heavy fines could be imposed by Germany's regulatory authorities • Price caps • European Competition Commission has had some success in getting electricity companies to sell off distribution networks • Greater competition from renewable energy firms Consumers switch to 'green alternatives' • Suppliers outside Germany as competition (e.g. energy imports) 1 mark for identification and up to 3 marks for explaining with reference to the data Evaluation 8 marks. Award up to 4 points: (3 + 3 + 2) or (4 + 4) or (2 + 2 + 2 + 2) marks or similar. • Fines might not have much effect if profits are very high • Selling off distribution networks still leaves main electricity companies with considerable market power • High cost of renewable energy might not provide much competition • Critique of competition authorities e.g. regulatory capture • Are the green suppliers really making a difference (line 39)? • Prioritisation with justification • Short run/long run issues • Discussion of size of price elasticity of demand in relation to the price cap • Increased profits can be good, e.g. can lead to investment and economies of scale in the future, or it might encourage new entry. Quality of written communication will be assessed in this question based on the candidate's ability: • To present an argument and conclude on the basis	(16)

	of that argument • To organise information clearly and coherently • To use economics vocabulary appropriately • To use grammar, spelling and punctuation appropriately	

Level	Mark	Descriptor
Level 1	1-3	Identification of policies and factors
Level 2	4-8	Identification of policies and factors (3 marks); explanation of each (up to 5 marks);
Level 3	9-16	Identification of policies and factors (3 marks); explanation of each (up to 5 marks). Evaluation (3+3+2 marks)

Question Number	Answer	Mark
10(a)	Theory 2 marks: oligopoly (1 mark) Explain: A few firms dominate the market; interdependent firms (1 mark) Application to market for instant coffee (2 marks) e.g. concentration ratio: 2 firm 68%, 3 firm 73%, 4 firm 76% (2 marks), or high levels of non-price competition, £17m investment by Nescafe is a barrier to entry, 20 year innovation period (Ext 2 line 19) (up to 2 marks) OR Theory 2 marks monopoly (1 mark) Explain: one firm has more than 25% of the market Application: 51% market share for Nescafe (2 marks), £17m investment by Nescafe is a barrier to	(4)

	entry (up to 2 marks) OR Duopoly (1 mark) Explain: two firms dominate market Application: concentration ratio 68%	

Question Number	Answer	Mark
10(b)	KAA 6 marks Award 3 points (2 + 2 + 2 or 3 + 3 or 3 + 2 + 1 or similar) Reasons include: • Lower costs of production of raw material e.g. poorer quality coffee beans • Other costs higher: rent on cafés; wages of staff • Demand for coffee in cafés less price elastic than demand for instant coffee • Starbucks wants to establish its Via brand in the market i.e. market penetration pricing, stiff competition from Nescafe marketing • Potential economies of scale in production of Via coffee much greater than for filter coffee • Low costs of marketing on entry • Starbucks cross-subsidise firms • To under-price competition e.g. McDonald's McCafe • Recession – have to keep prices down, Extract 2, line 19-20 Evaluation 6 marks (2 x 3 marks or 3 x 2 marks) might include: • Prioritisation e.g. critical consideration of costs • Missing information e.g. no cost comparisons given in the information • Short run, long run issues, e.g. prices might be a short term policy only; raise price once established • As the recovery progresses, prices may rise • Recovery might have the reverse effect, as the product is 'cheap and tasteless' Extract 2 line 1, because instant coffee is seen as an inferior good • There is already much competition besides McDonald's so Via might not make much difference	(12)

Question Number	Answer	Mark
10(c)	KAA 4 marks (2 x 2 marks or 1 x 4 marks) Meaning of contestability e.g. in terms of low sunk costs, low barriers to entry or exit (1 mark) Consideration of reasons why market may be contestable: Award as 4 or 1+3 or 2+2 or or 2+1 or 1+1. • Evidence of new entry e.g. Starbucks Via brand; McCafé espresso-based • Entry by supermarkets own label brands which have a relatively high market share (Figure 1) • Market for coffee growing so possibility of entry for niche suppliers • 'A growing willingness among consumers to trade up to premium and speciality variants' provides opportunities for new entrants. • 'Growing awareness of health, wellbeing and ethical trading' might provide opportunities for new entrants • Barriers to entry might fall as the internet has increased influence Evaluation 4 marks Consideration of reasons why market is not contestable Award as 4 or 1+3 or 2+2 or or 2+1 or 1+1 • Highly concentrated market: Nescafe supplies over half the market which implies high barriers • Strong brand names – examples from Figure 1 – supported by heavy advertising (high sunk costs) • Cost of machinery required • Entry only by well-established firms • Patent on Via is a legal barrier • 20 years of research into Via • Extract 1 £17m promotional campaign by Nescafe Candidate may take either approach (4 + 4e) or offer overall judgement, with justification.	(8)

Question Number	Answer	Mark
10(d)	KAA 8 marks. Award a maximum of four points: (2 + 2 + 2 + 2 or 3 + 3 + 2 marks or 4 + 4 marks or 4 + 2 + 2 + 1) Methods for US and UK • Pricing strategies • Limit • Predatory • Sales maximisation • Non pricing strategies e.g. developing 'ethical' products or corporate social responsibility • Use of branding • Increased advertising expenditure • Avoidance of price wars (could use game theory) • Limit pricing – to deter new entrants • Merger activity to gain advantages such as economies of scale • Price competition: to increase market share • Development of new up-market brands to compete with filter coffee • Collusion or other ways to remove competition can be seen as a way to compete. If no application to UK and US then cap 6/8 KAA marks Evaluation 8 marks. Award a maximum of four points: (2 + 2 + 2 + 2 or 3 + 3 + 2 marks or 4 + 4 marks or 4 + 2 + 2 + 1) • High fixed cost associated with developing and marketing a new brand (and advertising) • Many new brands are unsuccessful • New brand might reduce market share of the company's existing brands • Short run and long run effects • Limit pricing would reduce profits, at least in the short run • Firms might avoid price competition because of the risk of a price war. Game theory could be used to show why they do not engage in competition • Some strategies will attract the attention of the competition regulators • Assessing the wider impact of the measures e.g. redundancies Quality of written communication will be assessed in this question based on the candidate's ability:	(16)

	• To present an argument and conclude on the basis of that argument • To organise information clearly and coherently • To use economics vocabulary appropriately To use grammar, spelling and punctuation appropriately	

Level	Mark	Descriptor
Level 1	1-3	Identification of methods
Level 2	4-8	Identification of methods (3 marks); explanation of each (up to 5 marks)
Level 3	9-16	Identification of methods (3 marks); explanation of each (up to 5 marks). Evaluation (3+3+2 marks)

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Edexcel GCE

Centre Number	Candidate Number

Economics

Advanced
Unit 3: Business Economics and Economic Efficiency

Friday 29 January 2010 – 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** 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.

Turn over ▶

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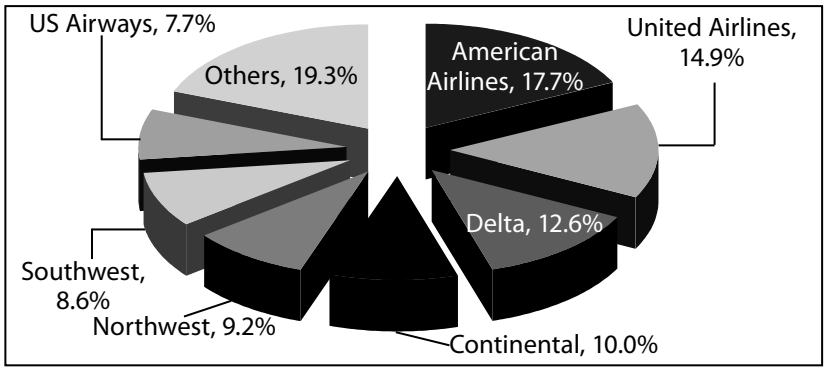


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Section A: Answer all the questions in this section

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 The following chart shows the percentage market shares of the US Airline Industry in 2006.



(Source: Adapted from 'Up in the Air' by David Jonas 31 March 2007 http://www.procurement.travel/news.php?cid=airline-procurement-strategy.Mar-07.31)

Which of the following can be deduced from the above information?

(1)

A The four firm concentration ratio is 64.5 per cent

B The US airline industry is monopolistically competitive

C The US airline industry is highly concentrated

D The US airline industry is a natural monopoly

E There are low sunk costs in the US airline industry.

Answer ☐

Explanation

(3)

(Total for Question 1 = 4 marks)

2 In May 2009 the German airline Deutsche Lufthansa AG took over Austrian Airlines. Which of the following was the most likely motive for this takeover?

(1)

A To avoid diseconomies of scale

B To gain from falling long run average costs

C To avoid an investigation by the Competition Commission

D To increase contestability

E To reduce unemployment.

Answer ☐

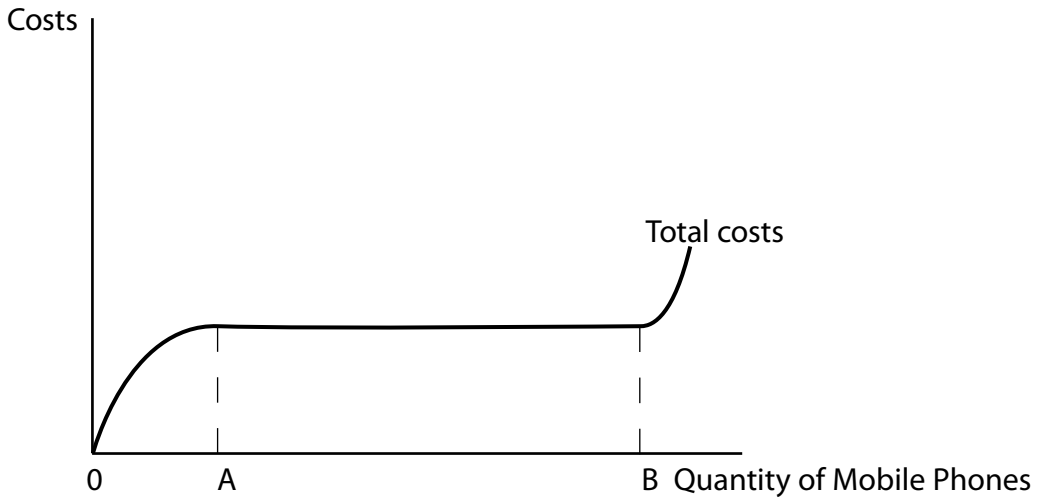
Explanation

(3)

(Total for Question 2 = 4 marks)

3 A mobile phone company finds that its total costs are best illustrated by the following curve. What can be deduced about costs over the usual range of output AB?

(1)



A Total costs are rising

B Marginal costs are zero

C Average costs are constant

D Average costs are rising

E Marginal costs are rising.

Answer ☐

Explanation

(3)

(Total for Question 3 = 4 marks)

4 Super normal profits being made by a perfectly competitive firm in the short run would disappear in the long run because of

(1)

A freedom of entry into this market

B firms engaging in large scale advertising

C differentiated goods

D allocative inefficiencies

E high sunk costs.

Answer ☐

Explanation

(3)

(Total for Question 4 = 4 marks)

5 A profit maximising monopolist facing constant average costs experiences a decrease in demand. Other things being equal, which of the following is likely to happen?

(1)

	Output	Price	Profit
A	Stays constant	Falls	Falls
B	Rises	Rises	Stays constant
C	Stays constant	Rises	Falls
D	Falls	Rises	Falls
E	Falls	Falls	Falls

Answer ☐

Explanation

(3)

(Total for Question 5 = 4 marks)

6 The grid below shows the possible pricing strategies of two ice-cream companies Juju and APJ. Assuming that demand is price inelastic, which of the following strategies shown in the grid would maximise the revenue of the two firms?

(1)

		Juju's price	
		High	Low
APJ's price	High	**A**	**B**
	Low	**C**	**D**

A Both firms set a high price

B APJ sets a high price and Juju a low price

C Juju sets a high price and APJ a low price

D Both firms set a low price

E Both firms set a price to increase consumer surplus.

Answer ☐

Explanation

(3)

(Total for Question 6 = 4 marks)

7 A firm in long run equilibrium under monopolistic competition will be

(1)

A allocatively but not productively efficient

B productively but not allocatively efficient

C productively and allocatively inefficient

D making supernormal profits

E allocatively and productively efficient.

Answer ☐

Explanation

(3)

(Total for Question 7 = 4 marks)

8 In the United States, limits have been placed on profits of recently privatised utilities, relative to the value of their capital assets. What may be considered the biggest disadvantage of this method of regulation?

(1)

A Firms will undervalue their capital assets

B Quality may decline as the regulator forces costs down

C The firm can make unlimited supernormal profits

D Firms have little incentive to become more productively efficient

E Firms are encouraged to make excess profits which they pay out as dividends to shareholders.

Answer ☐

Explanation

(3)

(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 20.

You should spend 55 minutes on this section.

9 British Airports

Extract 1 International bidders line up for British Airports Authority (BAA) airport sale

Following a ground-breaking report this week from the Competition Commission, BAA (an airport operator) has been forced to put Gatwick airport up for auction. International infrastructure groups have approached BAA with offers to buy Gatwick, London's second airport, for up to £3 billion. The Spanish company Ferrovial bought BAA for £10.3 billion two years ago.

The competition watchdog says that BAA's ownership of London's three largest airports – Heathrow, Gatwick and Stansted – is against the public interest. It will be the first time the Commission has forced the sale of an asset outside a takeover or merger situation.

The sale process could take two years and could eventually yield a healthy profit for Ferrovial. The sale would end a system of ownership that has existed for more than 40 years. BAA has owned seven of the UK's largest airports, including the London trio, since 1965.

Source: Adapted from 'International Bidders line up for BAA airport sale' by Dominic O'Connell *The Sunday Times* 17 August 2008.

Extract 2 Regulation, not competition, will shape airports

It is quite possible that you could be reading this in an airport lounge sitting out a delay to your flight. You will be irritable and likely to vent your frustration against both the airline and the airport operator which, if you are in southeast England, is most likely to be BAA.

That is why, when the Competition Commission decrees this week that BAA's monopoly of airport ownership should be broken up, the news will be met with almost universal joy.

However, the truth is that even if BAA is forced to sell one of its airports in southeast England – either Gatwick or Stansted, it is unlikely to make any difference to the future of aviation in Britain. The world's big airlines want to go to Heathrow, not to Gatwick or Stansted, and it is doubtful whether a change in ownership will alter that.

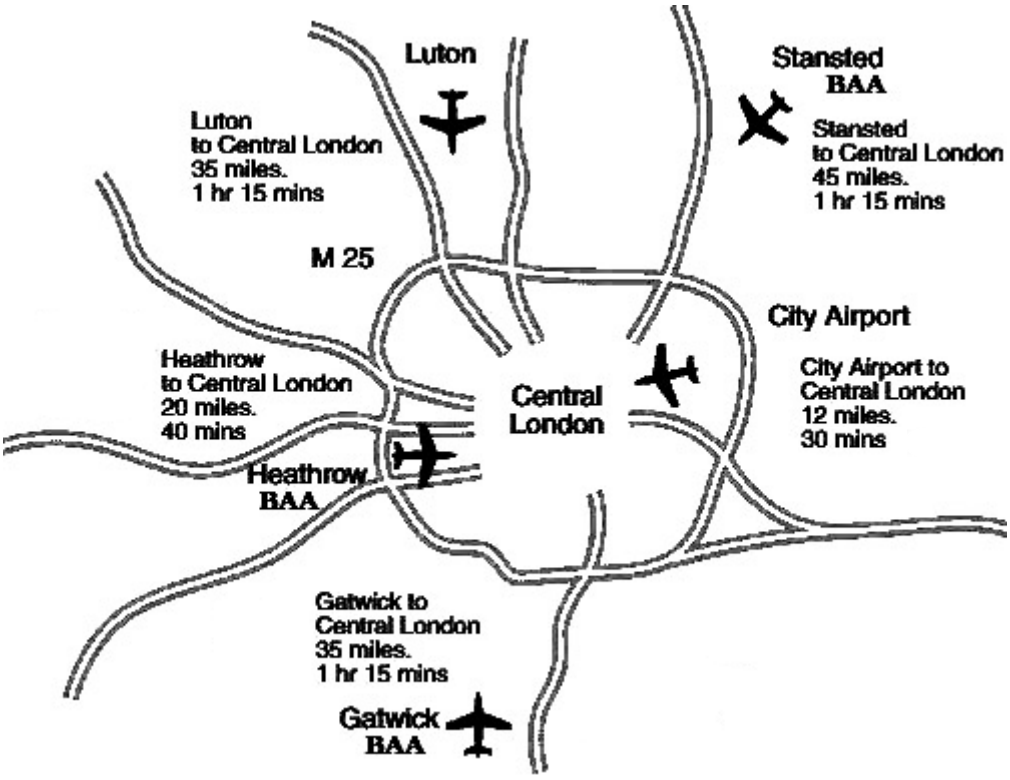
Admittedly it could improve the customer experience and bring in some much-needed competition. However the future of Britain's airports will be determined by regulation and planning rather than by competition.

If a company buys Gatwick it will not alter the fact that BAA is locked in an enormous battle for a second runway at Stansted and a third at Heathrow. The Commission's findings will be welcomed, but they will not address the big picture.

Making airports work financially is about making the best of the asset. That means pressing for more flights and more runways and it is the government that holds the key to that.

Source: Adapted from 'Regulation, not competition, will shape airports' by John Waples *The Times* 16 August 2008.

Figure 1: Map of airports around London



Source: Adapted from http://www.travelguidelondon.co.uk/london-guide/places-and-tourist-sites/london-luton-airport-map-directions-information.html.

(a) What does the information provided suggest is the market structure of the airport industry in London? Explain your answer.

(4)

*(b) Assess the case for increased competition in the airport industry.

(14)

(c) Discuss the effectiveness of the Competition Commission in regulating industries such as the airport industry.

(8)

*(d) BAA charge more for landings at Heathrow than at other airports. Evaluate the reasons for **and** consequences of such a policy.

(14)

(a) What does the information provided suggest is the market structure of the airport industry in London? Explain your answer.

(4)

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(14)

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(14)

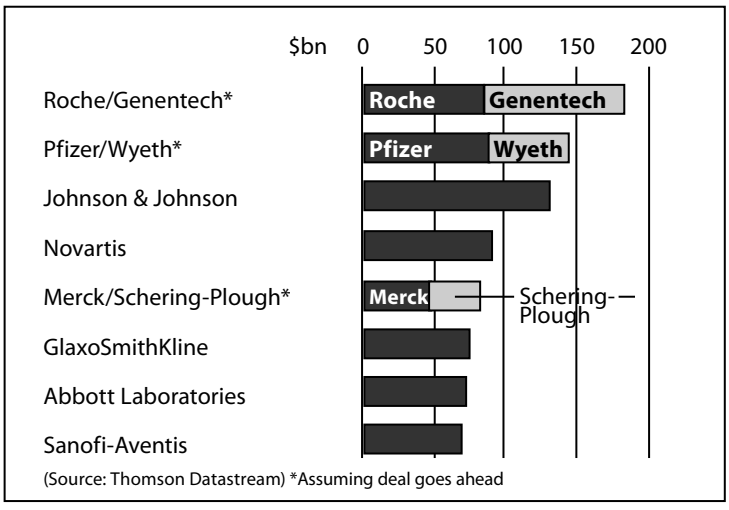
(Total for Question 9 = 40 marks)

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If you answer question 10 put a cross in this box ☒ .

10 The Pharmaceutical Industry

Figure 1: Global Pharmaceutical Companies by market capitalisation, March 2009, $bn



(Source: Thomson Datastream) *Assuming deal goes ahead

Extract 1 Merck's manoeuvres

In recent times there has been a series of mergers between pharmaceutical companies. Merck, a US company, has agreed to take over Schering-Plough; Pfizer is acquiring Wyeth; and Roche, a Swiss pharmaceutical company, is paying $46.8bn for 44% of Genentech, an American firm.

Big drugs companies hope mergers and takeovers will solve their various problems: the lack of new blockbuster drugs coming through their research pipelines; competition from generic (non-brand name) drugs as patents expire, the global economic crisis, and an over-dependence on sales in America, where health-care reforms are likely to reduce profit margins. However, the evidence suggests that many of the supposed benefits of pharmaceutical mega-mergers fail to materialise: bigger firms are no better at innovation, and are often worse. But bosses are pressing ahead anyway.

The main attraction of buying Schering-Plough is that Merck will double (to 18) the number of drugs it has in late-stage development. Merck will also strengthen its international and over-the-counter sales, both areas where Schering is strong (70% of its revenues come from outside America). In addition, Mr Clark promises that there will be cost savings of $3.5 billion a year after 2011. But this sounds unlikely, given that both companies are already cutting costs heavily. And if the two firms' research teams are so complementary and do not overlap much, as Merck claims, who is going to get sacked?

The deal does at least answer critics who complained that Merck was not acting as vigorously as competitors in buying rivals and moving into new markets. But it also represents a change in strategy for Merck, which unlike many of its competitors has stayed on the sidelines during the industry's previous waves of mega-mergers. Instead, the company has always preferred to grow by developing new products in its laboratories. The task for Mr Clark, who will become boss of the new company, will be to make the deal go smoothly, despite his lack of experience with big mergers.

Source: Adapted from 'Merck's manoeuvres' published in *The Economist*, 13 March 2009.

Extract 2 Letter from the Consumers Union to Federal Trade Commission in the USA

Dear Sir:

On behalf of the Consumers Union, we urge you to review carefully the competitive and innovation consequences of the proposed Pfizer-Wyeth pharmaceutical company mergers. Our members consistently tell us that high and ever-rising health care costs are a major household fear, and high brand name prescription drug prices are a particular concern.

We urge the Federal Trade Commission to review this proposed merger and its impact on

- long-run competition in the pharmaceutical industry and its likely impact on drug prices;
- innovation and the development of new, breakthrough drugs.

The merger will result in thousands of employee redundancies. What percent of those lay-offs are in research and development, and are those lay-offs strictly in areas where the two companies were duplicating research, or are new and unique lines of research being terminated?

We are faced with continual abuses of good public policy by many in the industry. For example, some firms use payments to buy delays in the entry of competitive generic drugs into the market.

We hope that you will consider a major study of the entire pharmaceutical industry. Why are prices for consumers so high, why has the breakthrough drug pipeline slowed down, and what policies should we pursue as a nation to encourage the more rapid discovery of affordable medicines? Is this merger between Pfizer and Wyeth good or bad for the goal of affordable, new, life-saving drugs?

Thank you for your consideration of these views.

Sincerely,
William Vaughan
Health Policy Analyst
Consumers Union

Source: http://www.consumersunion.org/pub/campaignprescriptionforchange/009344.html.

(a) What does the information provided suggest is the market structure of the pharmaceutical industry? Explain your answer.

(4)

*(b) Discuss the benefits that Merck might expect to gain through the takeover of Schering-Plough.

(12)

(c) Evaluate **one** pricing and **one** non-pricing strategy that Merck could adopt to increase sales.

(12)

*(d) To what extent would further mergers and takeovers in the pharmaceutical industry be in the best interests of consumers and employees?

(12)

(a) What does the information provided suggest is the market structure of the pharmaceutical industry? Explain your answer.

(4)

*(b) Discuss the benefits that Merck might expect to gain through the takeover of Schering-Plough.

(12)

(c) Evaluate **one** pricing and **one** non-pricing strategy that Merck could adopt to increase sales.

(12)

*(d) To what extent would further mergers and takeovers in the pharmaceutical industry be in the best interests of consumers and employees?

(12)

(Total for Question 10 = 40 marks)

TOTAL FOR SECTION B: 40 MARKS
TOTAL FOR PAPER: 72 MARKS

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Mark Scheme (Results)
Winter 2010

GCE

GCE Economics (6EC03/01)

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General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

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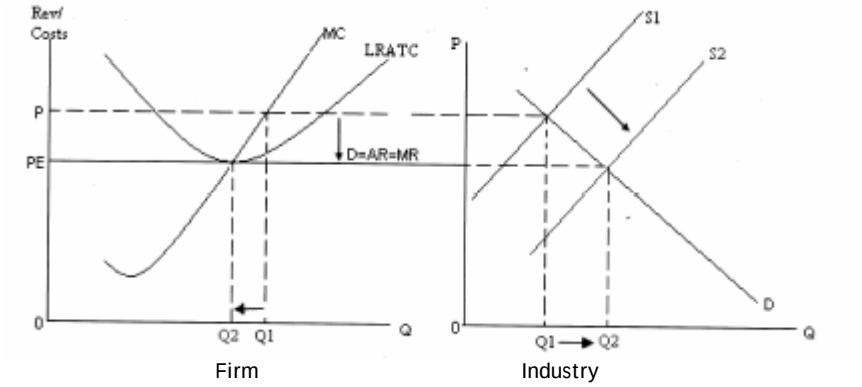
General marking observations for supported choice questions

Up to (**2 marks**) may be earned for knocking out incorrect keys, if the letter of the key to be eliminated is provided and a valid reason is given, with **(1 mark)** per key/keys with reason. For the explanation, (**3 marks)** can be earned even if key is incorrect, where the explanation provides sufficient evidence that the question has been understood.

Question Number	Answer	Mark
1	**C** Definition of high concentration, e.g. reference to a few firms having a high market share **(1 mark)** Calculation of three/four/five etc firm concentration ratio CR 3 = 45.2% CR 4 = 55.2% CR 5 = 64.4% CR 6 = 73.0% CR 7 = 80.7% **(1 mark)** Market structure is oligopoly **(1 mark)** Other reference to data, e.g. strong brand names **(1 mark)**	**(4)**

Question Number	Answer	Mark
2	**B** Definition of economies of scale – falling **long run** average cost as output increases or LRAC diagram **(1 mark)** Identification **(1 mark)** and application **(1 mark)** of one type of economy of scale to airlines when they join together Horizontal integration explanation **(1 mark)** E.g. bulk buying (type) of fuel (application) = 2 marks	**(4)**

Question Number	Answer	Mark
3	**B** Definition of marginal cost e.g. cost of producing one more unit, or formula '**change in** total cost divided by **change in** quantity' **(1 mark)** Understanding that total costs are constant **(1 mark)** and therefore the marginal i.e. change in total cost is zero **(1 mark)** Allow 'no variable costs' **(1 mark)** but not 'all costs are fixed'. Possible knock outs: It is not C or D because average costs are falling, it is not A because total costs are constant	**(4)**

Question Number	Answer	Mark
4	**A** Definition of normal profit or supernormal profit verbally or as formulae normal profit AC = AR or supernormal AC<AR **(1 mark)** Understanding of the existence of perfect knowledge which means that these profits **attract** new firms **(1 mark)** into the industry benefitting from no or low **barriers to entry** such as sunk costs **(1 mark)** and therefore profits are competed away (**1 mark)** Diagram to illustrate entry of new firms in long run up to **(2 marks)** If diagram has no industry and just shows long run perfectly competitive firm **(1 mark)**  	**(4)**

Question Number	Answer	Mark
5	**E** Definition of profit maximisation MC = MR (1 mark) The use of diagram showing the fall in price, fall in output, constant AC and fall in AR and MR can be rewarded with full marks (**3 marks)** **cap diagram 2 out of 3 marks if AC or MC are shown to change.** **of which** shift left/down of AR and MR (1 mark), original and new equilibrium/price (1 mark), new profit area (1 mark). A written analysis should include explanation of falling prices **(1 mark),** output **(1 mark)** and profits **(1 mark)**, more than just repeating key. **Up to 3 marks**	**(4)**

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Question Number	Answer	Mark
6	**A** Price inelastic demand means that higher revenue for firms is gained when prices are higher **(1 mark)** Game theory: • Consumers have no choice but to pay the high prices because of market power **(2 mark)** • Possible collusion identification and application **(2 marks)** • Understanding that they tend not to trust each other and therefore they will most likely end up at cell D i.e. both low prices as a result of a price war **(2 marks)** Kinked demand approach: • Elastic demand if prices rise **(1 mark)**, but inelastic demand if prices fall **(1 mark)**. Diagram showing a kink in AR or demand **(1 mark)** Interdependence **(1 mark)**	**(4)**

Question Number	Answer	Mark
7	**C** Definition of monopolistic competition or at least one characteristic e.g. firms have differentiated products and therefore the demand is not perfectly elastic has low barriers to entry, many firms **(1 mark)** Explanation of lack of productive efficiency **(1 mark)** Explanation of lack of allocative efficiency **(1 mark)** Supernormal profits will be competed away in long run OR only normal profits in the long run **(1 mark)** Diagram to illustrate long run position showing allocative and productive inefficiency can rewarded up to (**2 marks)**	**(4)**

Question Number	Answer	Mark
8	**D** Role of a regulator **(1 mark)** After a certain amount of profit is earned, the marginal tax rate is 100% (everything is taxed) **(1 mark)** The company will be allowed to charge a price equal to the average cost of production **(1 mark)**, A 'fair' **rate of return** on capital is allowed for firms **(1 mark)** which removes all incentive to make efficiency gains or increase profits **(1 mark).** Contrast with other forms of regulation **(1 mark).**	**(4)**

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General marking observations for data questions

50% of the marks are to be awarded for evaluation, in all **except** the 4 mark questions. The Levels of Response are to be used as general guidance, but marks must be awarded if criteria on the mark scheme are identified.

Question Number	Answer	Mark
9(a)	**Theory (2 marks):** a monopoly **(1 mark)** – at least reference to one characteristic **(1 mark)** or identification of Competition Commission legal definition of 25 per cent of market share **(1 mark)** **Application** to information provided **(2 marks):** e.g. 'BAA's ownership of London's three largest airports' (Extract 1, line 6) (**1 mark)** **Allow oligopoly up to 4 marks, if argued convincingly that there is a degree of competition in the London market. This must be supported by evidence**, e.g. reference to Luton and City Airport as non-BAA owned in Figure 1**.**	**(4)**

Question Number	Indicative content	**(14)**
9(b)	Concept of increased competition (e.g. there will be more firms in the market) **(1 mark)** Benefits of competition up to **6 marks** for 2 or 3 benefits **(3+3 or 2+2+2 or 3+2+1)**. These may include: Consumer benefits (passengers) • Lower prices for consumers, as costs fall • Better service – candidates could expand on this as a secondary point – for example o Fewer delays o Fewer bags lost o Better experience o Smaller queues o Better transport links Consumer benefits (airlines) • Greater choice of airports • Greater productive or allocative efficiency – candidates could try to compare monopoly with perfect competition to illustrate the gains • Higher profits Government benefits • More tax income • Improved trade **Answers must be focused in airports, but airlines can be viewed as customers.** **Evaluation 7 marks - up to 3 marks + 4 marks for each evaluation point made, or 2 + 2 + 3 marks or 2 + 2 +2 +1 or similar, best four points only.** Points might include • Allocative inefficiency as firms spend money trying to compete.	

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	• Loss of economies of scale causing LR average costs to increase • Loss of integrated connections between airports • Consumer confusion • Discussion whether the airport market can sustain competition or whether it is essentially a natural monopoly. • Even after the sale of airports an oligopoly will still exist which may exploit the consumer • Reduced contestability • Reduced profitability may deter new entrants or investment		
Level	Mark	Descriptor	
Level 1	1-3	Identification of one benefit **(1)** and explanation of this benefit **(2)**	
Level 2	4-7	Identification of three benefits **(up to 3)** and explanation of these benefits **(up to 3)** Brief evaluation **(1)**	
Level 3	8-14	Identification of three benefits **(up to 3)** and explanation of these benefits **(up to 3)**. Evaluation (2 points x 3 marks or 3 points x 2 marks) – **total for evaluation 7 marks**	

Question Number	Answer	Mark
9(c)	**KAA 4 marks (2 x 2 marks or 1 x 4 marks)** Factors might include: • Role of Competition Commission (CC)**(2 marks)** • Application to an industry, this may include airports or airlines **(2 marks)** • Specific types of regulation or powers of the CC **(2 marks)** • Enterprise Act 2002 e.g. the CC directs not just advises increased powers to fine 10% revenue for three years, jails term for directors, ability to force sale of assets **(2 marks).** **Evaluation 4 marks (2 x 2 marks or 1 x 4 marks)** • Award counterarguments to the points above, either for or against regulation • Indication of the problem that faces the authorities in trying to encourage competition e.g. regulatory capture, information asymmetry. This may include reference to the extract. • Time for investigation is too long • Cases need to be referred (selection or time issue) • EC supersedes CC and other issues regarding international regulation • Regulation meant to only be a short term solution until competition is possible • Also reward the arguments offered in Extract 2 as to why regulation and planning would be better • Government failure may reduce effectiveness of regulation • Competition may cause problems outlined above – don't reward a repetition of the answer to 9b	

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Question Number	Indicative content **(14)**
9(d)	**KAA 7 marks** Reasons for policy **(up to 4 marks 2 x 2 marks or 1 x 4 marks):** • Increased profits • Increased revenue/demand • Price inelastic demand/monopoly power • Higher costs • Increased market share in markets where demand is more elastic • Prevent other firms from entering the more contestable markets • Analysis of price discrimination • Allow up to 2 marks for a firm sub-markets diagram showing different elasticities prices, • Application of data e.g. Heathrow with low PED and Gatwick with higher PED (could be on diagram) Consequences of policy **(up to 4 marks 2 x 2 marks or 1 x 4 marks**) might include: • Profits/revenue/market share increase • Involvement of the Competition Commission • Lost consumer welfare as fare prices rise • Effect on airlines – less profit, higher costs • Deters new entrants **Evaluation: (up to 7 marks for 2 points 4+3 or 3 points 3+2+2 or 2+2+2+1 or similar)** Points might include: • This is price differentiation/product differentiation NOT price discrimination • Arrival of competition may mean that the policy cannot last in the long run • If prices are too high this may have a wider impact on the demand for London as a tourist and business destination, which will force the regulator/competition commission to intervene • Excess profits may attract undue attention from regulator • Relative price of other airports • Other costs might be more significant to airlines, e.g. fuel or cabin crew • Other problems of price/product differentiation • Other wider issues, e.g. externalities impact (the 'environment')

Level	Mark	Descriptor
Level 1	1-3	Definition of price discrimination **(1)**, identification of a cause and consequences of policy **(2)**
Level 2	4-7	Identification of several valid causes and consequences, with limited explanation/application
Level 3	8-14	Well applied and explained causes and consequences. Evaluation (2 points x 2+3 marks or 3 points x 2 + 2 +1 marks) – **total for evaluation 7 marks**

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Question Number	Answer	Mark
10(a)	**Theory (2 marks):** An oligopoly **(1 mark)** – at least reference to one characteristic **(1 mark)** **Application** to pharmaceutical industry **(2 marks):** identification of characteristics in evidence provided	**(4)**

Question Number	Indicative content	
10(b)	**KAA 6 marks** Identification and explanation of up to 3 benefits **to Merck** **(2+2+2 or 3+3 or 3+2+1)** These may include • Economies of scale (accept 3 economies of scale as different factors) – marketing, financial, risk bearing, R &D • Access to new markets e.g. Schering 70% of market outside US • Access to new patents • Protection from unwanted predators • Higher market share, e.g. elimination of competition, widening scope **Must be benefits to Merck, not other stakeholders** **Evaluation**: Award **6 marks (2+2+2 or 3+3 or 3+2+1)** Factors may include • Diseconomies of scale • Likely costs of the merger e.g. dilution of shareholder value • Possible investigation by competition agencies such as the Federal Trade Commission • Possibility that the merger might not succeed • Possibility that the firms will not be able to adequately integrate • Time lags in realising the benefits.	**(12)**

Level	Mark	Descriptor	
Level 1	1-3	Identification and weak explanation of up to 2 benefits **3 marks**	
Level 2	4-6	Identification and explanation of up to 3 benefits **6 marks** Brief evaluation **(1)**	
Level 3	7-12	Identification and explanation of up to 3 benefits **6 marks** Evaluation: Identification and explanation of up to 3 evaluation **6 marks**	

Question Number	Indicative content	
10(c)	6 KAA marks or which **(3 marks)** for price strategy and **(3 marks)** for non-price. Award as 3 marks for 1 point or 2 + 1 for two points Identification of one **price** strategy (**1**) and application and/or analysis (**2**). Strategies may include: • Predatory pricing • Limit pricing • Sales maximisation • Revenue maximisation • Buy one get one free • Price discrimination • Undercutting rivals Identification of one **non-price** strategy (**1**) and application and/or analysis (**2**). Strategies may include: • Further increases in efficiency • Investment into new technology to increase productivity. • Improve product quality • Marketing campaign to win business customers. • Advertising • Promotion through other means, bundling products (which may be identical) • Move production abroad • External growth **Award maximum 4/6 if no reference to the pharmaceutical industry**. **Evaluation (3+3 or 2+2+2 or 3+2+1)** A range of ideas could be developed, for example: ➢ It may be harder to make further increases in efficiency; all firms trying to engage in R&D ➢ Depends on PEDs ➢ There may be retaliation, e.g. price war ➢ Short term/long term success ➢ Investment /R&D is expensive and there is no guarantee of success. ➢ Improving product quality is expensive ➢ Marketing is expensive and no guarantee of success ➢ Predatory pricing is illegal so there might be fines ➢ Benefits or costs to other stakeholders.	
Level	Mark	Descriptor
Level 1	1-3	Identification of one **non-price or price** strategy (**1**) and analysis (**2**).
Level 2	4-7	Identification of one **non-price and price** strategy (**2**) and analysis (**4**). Brief evaluation **(1)**
Level 3	8-12	Identification of one **non-price and price** strategy (**2**) and analysis (**4**). Extensive evaluation **(Up to 6)**

<table>
<tr><th>Question Number</th><th colspan="2">Indicative content</th></tr>
<tr><td>10(d)</td><td colspan="2">KAA 6 marks (3 marks for consumers and 3 marks for employees) of which (3 or 2+1)

Identification and explanation of advantages to consumers
• Economies of scale and other synergies mean lower LRAC and therefore lower prices
• Greater profits/R & D budgets mean more breakthroughs
• Reduction in competition may mean firms can divide up market to research particular areas of expertise, so more choice for consumers

Employees
• Increased job security as profits rise
• Higher wages/perks
• Share options increase in value
• More scope for promotion in larger firms
• Allow non worsening situation as being in the interests of employees

Evaluation 6 marks (3 + 3 marks or 2 + 2 + 2 marks)
Factors may include:
• Greater possibility of collusion to raise prices
• Less incentive to innovate and produce better drugs
• Increased chance of x-inefficiency and exploitation or price discrimination
• Prices rise if there are diseconomies of scale
• Worker redundancies
• Morale issues
• Less choice because there are fewer firms</td></tr>
<tr><td>Level</td><td>Mark</td><td>Descriptor</td></tr>
<tr><td>Level 1</td><td>1-3</td><td>Identification of advantages to consumers (Up to 3 marks)</td></tr>
<tr><td>Level 2</td><td>4-6</td><td>Some understanding of public interest – benefit to consumers. 1 mark
Identification and explanation of 2 advantages to consumers (Up to 4 marks)
Limited evaluation (Up to 2)</td></tr>
<tr><td>Level 3</td><td>7-12</td><td>Identification and explanation of 2 advantages to consumers (Up to 4 marks)
Extensive evaluation (Up to 6)</td></tr>
</table>

	Knowledge	Application	Analysis	Evaluation	Total
1	1	2	1	0	4
2	2	1	1	0	4
3	1	1	2	0	4
4	1	1	2	0	4
5	2	1	2	0	4
6	2	1	1	0	4
7	2	1	1	0	4
8	1	2	1	0	4
9a	1	2	1	0	4
9b	2	2	3	7	14
9c	2	2	0	4	8
9d	2	2	3	7	14
10a	1	2	1	0	4
10b	2	2	2	6	12
10c	2	2	2	6	12
10d	2	2	2	6	12
Total	18	18	18	18	
Total (%)	25	25	25	25	