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Examiners' Report
June 2016

GCE Economics 6EC03 01

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June 2016

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Introduction

This final paper in the Curriculum 2008 model followed the same patterns and expectations as in recent papers. Candidates did not face any particular problems and many could complete the paper in the time available. There were very few rubric errors, and most candidates have grasped the exam technique that is expected.

There were 7609 entries for the exam this marking series (2015 was 6500), and marking was completed on time.

There were no reported errors on the paper, and the rubric was adhered to. As in 2015 and 2014 there were no questions of game theory, but many candidates used game theory concepts effectively in their extended answers, and many candidates clearly wanted to use price and non-price strategies, and again although this was not examined directly, there was an opportunity to use strategic decision-making as reasons for why firms might dominate an industry.

The most popular optional question was 9 over question 10 by a ratio of almost 3:2. This was unexpected, in that 9(a) and 9(b) covered monopsony and 9(c) was on problems that regulators face (a uniquely difficult question), and the overall mean for question 9 was 25.96 while it was marginally higher on question 10 at 26.09.

The quality of answers in terms of economic knowledge seemed similar to 2015 and 2014 but it must be remembered in awarding that in years previous to 2014 there was a January paper which 'creamed off' the most able, domestic candidates. The reason for the fall in the mean was the fall to the longer term average on the supported choice questions, after a higher mean for these in 2015.

The main comments from the team leaders and markers were poor quality of handwriting, good understanding of what was required in terms of how to answer the longer questions, and that candidates that use standard theory and apply it to the context given can earn marks efficiently. There were increasingly formulaic answers and it was therefore felt that the move to a new assessment system would be useful in terms of reducing the learning of exam technique at the expense of economic concepts.

Question 1

Most candidates found this question accessible. The mean score was 3.8 out of 4, and with a standard deviation of 0.62 this was the highest ever scoring supported choice questions. While this made it fairly ineffectual as a discriminator, it was a welcomed 'warm up' question.

The most common error was to misread the question and assume the integration was forwards, or equally to think that the two firms are producing cars and engines which are therefore in the same industry.

The favoured knock out was B, horizontal integration, and E conglomerate, and there was an effective way to gain up to two marks by illustrating that these forms of mergers could not be correct, with a valid reason why in each case.

This answer illustrates the common mistake as described above, but equally how to gain two knock out marks effectively.

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 [C]

Explanation

(3)

Forward vertical integration is a form of vertical integration where a firm merges with another firm that is in the earlier stages of the productive process. C is correct the firm gains benefit from being able to have some form of control on the supply chain.

B is incorrect as horizontal integration involves merging with a firm in the same stage of the production process.

E is wrong as this involves the merger of 2 firms in 2 different industries

Q

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Examiner Comments

Incorrect key

Vertical integration – different stage of production – 1

They have confused backwards and forward integration

Knock out of B and E are valid – 1 + 1

Maximum 2 marks if key is incorrect 0 + 2

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Examiner Tip

In a three mark question, even in the new specification, it is essential to find three separate marks – valid pieces of economic analysis, application of context, or steps in a process.

Answer D

Explanation

(3)

Backward vertical integration is when one company merges with another in the same line of production (industry) but further away from the consumer. e.g. RRPS if further away from the consumer than Rolls-Royce Motor. A benefit of this is monopoly over supply as Rolls-Royce can now stop RRPS from supplying other firms. It isn't E as Conglomerate integration is when a company merges with a company from a different line of production (industry) e.g. a different market. it is an example of diversification but both rolls royce and RRPS are in the same industry

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Examiner Comments

Correct key

Same line as production (vertical) – 1

Further away from the consumer – 1

Benefit – stop supplying other firms – 1

Knock out of E is also valid 1 + 3

Question 2

There was a wide range of answers to this question, in terms of choosing an option, but those that did choose correctly tended to score highly for the explanation.

The use of diagrams tended to be imprecise, and incorporated a generic AC/MC/AR/MR diagram with no specific part highlighted (the portion where AC was falling and MC both falls and rises).

The mean was 2.0 and the SD 1.42, effectively compensating the low SD on question 1.

The main distractor chosen was B, the law of diminishing returns has not set in, which was stark evidence that candidates do not really understand this concept.

However, it was very pleasing to see answers where marginal analysis was used effectively. An answer that explained that the very fact that MC is below AC is the reason why MC was falling was extremely welcome to read. When this was accompanied by a diagram (which could earn up to two marks in itself) the answer was extremely rewarding to mark.

This answer explains the most common approach given.

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 [B]

Explanation

(3)

The law of diminishing marginal returns states that as one unit of input increases ~~as one fixed~~ and variable factor through one variable factor whilst other are fixed, that a units of output will eventually see diminished marginal returns. This is a short run concept. It cannot be A as economies of scale are a long run concept. Because law of diminishing returns has not set in yet,

the ave average cost decreases as output increases

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Examiner Comments

Key incorrect (1)

Definition of Law of diminishing returns is not accepted because this is only valid if used as a knock out (0)

Concept of short run & fixed factor (1)

Knock out of A is correct (see mark scheme example) (1)

0 + 2 = 2

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Examiner Tip

Specialising your resources in revision on the law of diminishing returns will increase your 'marginal product'.

By contrast, this is the answer to maximise returns.

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)

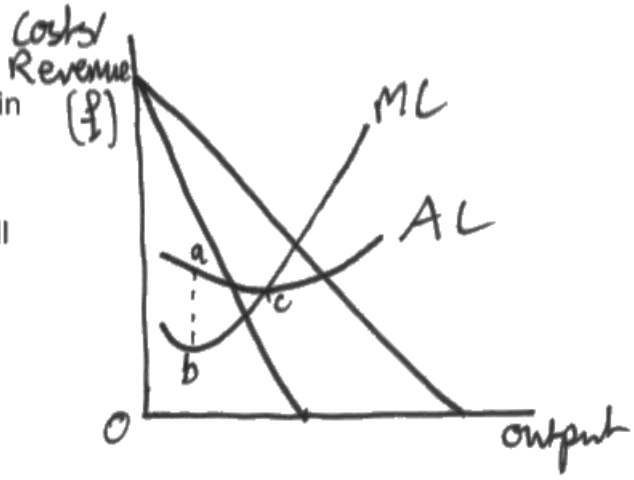
A there are economies of scale

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 E

Explanation

(3)

Marginal costs are the costs of producing an additional unit of output. As shown on the graph, the firm is likely operating in area a b c, where MC is rising and AC is falling. The answer cannot be B, as MC is rising, so returns are diminishing.

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Examiner Comments

Key correct (1)

Definition of MC (1)

Diagram (1+1) showing the area concerned and the relationship between the two (supported by text MC rising, AC falling)

Knockout (1)

1 + 3 = 4

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Examiner Tip

The diagram is extremely effective in showing the regions of the curves being discussed.

Question 3

This was a fairly testing question, and some candidates that could fill in the table correctly could not identify the correct key, as there were two points where MC=MR. Clearly the one making a loss, where MC meets MR from above, is hardly a profit maximising output.

Most candidates however could not calculate the TC from the MC, which was disappointing to see.

Some answers contained a constant AR and MR but this was not enough to trigger in their response the concept of perfect competition, and a surprising number chose monopolistically competitive as the market structure.

This is a fairly typical answer where the candidate has earned the marks several times over.

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	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

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 → T.R = 10, TC = 22

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 22

Answer ~~A~~ E

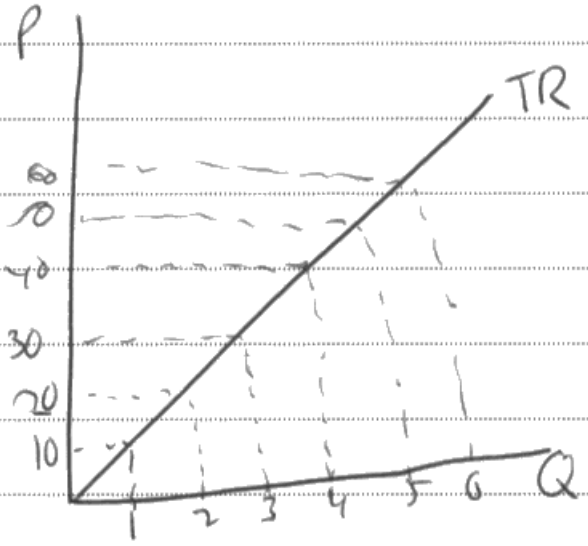
10

TR @ Q3 = 30
TC @ Q3 = 33
∴ @
30 - 33 = -3
negative ∴
or making SNP
∴ D is wrong

Explanation

(3)

Maximising profit is when MC = MR.
It is not Q because here they are
actually making
And Total revenue is ~~@~~ increasing
@ at a constant rate meaning
the firm is in perfect competition because
in this market ~~the~~ firm
power is a price
taker.
Normal profits are
@ the ~~A~~ point where
AR = AC.



50 = MR @ Q = 5

50 = TC @ Q = 5

50 = 50 ∴ TC = TR ∴ E is correct

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Examiner Comments

Key correct (1)

3 table columns correct (1 + 1 + 1)

MC = MR (1)

Straight TR (1)

Firm is a price taker (1)

AR = AC (1)

1 + 3 = 4

ResultsPlus
Examiner Tip

For three marks you have to do three discreet pieces of economics – and this will be true in the new specification too.

This is a typical answer and the level of confusion is clear from the amount of crossed out work.

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	10	22	22	10
2	20	10	32	14	10
3	30	10	43 47	11	10
4	40	10	57	10	
5	50	10	67	10	
6	60	10		13.5	

TC = MC + AC

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

MR = AC (1)

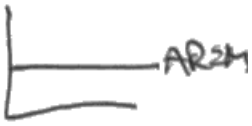
A monopolistic competition in the short run and will operate at 4 units

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 A

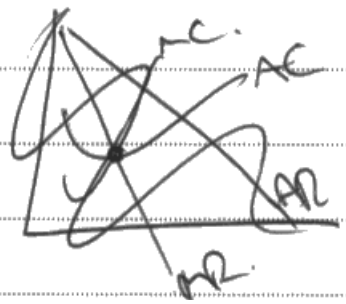
Explanation

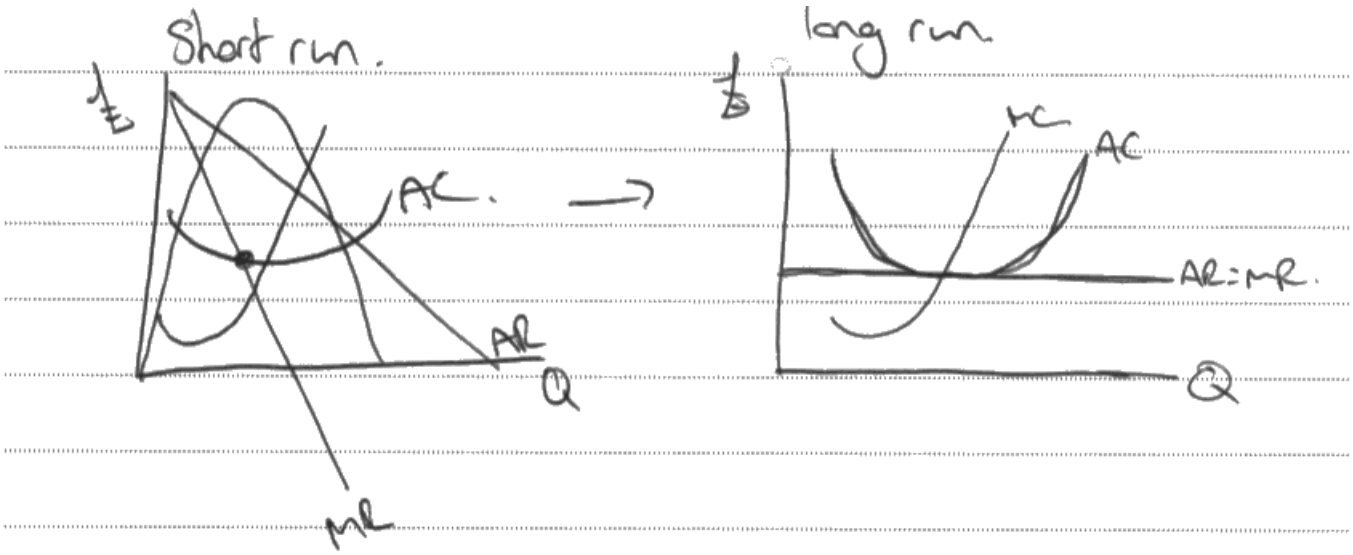
(3)

'C' is wrong as they aren't making supernormal profits, their total revenue is less than their total cost.

MR=AC is profit maximising.

They will operate at 4 units to gain profit max as MC = AR here, but in the long run, new firms will enter the market and reduce profits as there is now competition.





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Examiner Comments

Key incorrect (0)

Sketch on page 1 AR = MR (1)

AR/MR column in table is correct (1)

C is wrong – true that they are making a loss (1)

MR = AC incorrect (0)

"They will operate at 4 units..." incorrect (0)

Diagram showing long run perfect competition is not given additional marks because AR = MR has already been awarded (0)

0 + 2 = 2

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Examiner Tip

Although using the table is an effective way to earn marks, there are other ways, so if the arithmetic lets you down, resort to other knowledge.

Question 4

Most candidates found this fairly accessible, with a mean score of 3.37. There were two common errors: misreading the question (changing from profit maximisation to revenue maximisation rather than the reverse) and confusing MR=0 with AR=AC (sales maximisation).

The key is to read the question carefully and use a diagram for an efficient way to earn marks.

This was a typical, confident and efficient answer to this question.

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?

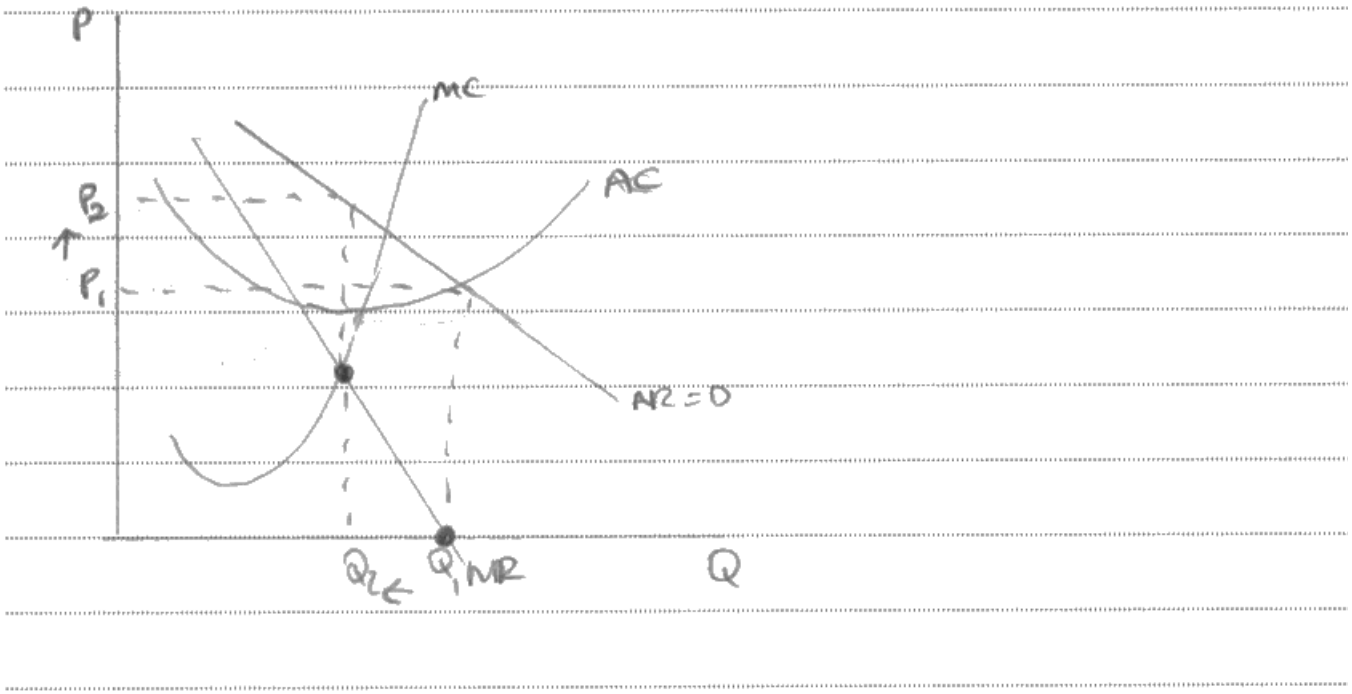
(1)

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

Answer B

Explanation

(3)



Revenue maximising is when marginal revenue equals zero and occurs at output Q_1 and price P_1. Profit maximising is when marginal revenue meets marginal cost and is where quantity is Q_2 and price P_2. Therefore moving from revenue maximising to profit maximising reduces quantity/output (Q_1 to Q_2) and raises price (P_1 to P_2).

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Examiner Comments

Correct Key

Diagram 2 marks – both objectives output and prices shown correctly

Rev max (MR=0) – 1

Profit max (MC=MR) – 1

Total 1 +3

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Examiner Tip

'A picture saves a thousand words' – in this case the diagram earns two marks so there is little more needed to find the third explanation mark.

This is one of the few low scoring answers.

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?

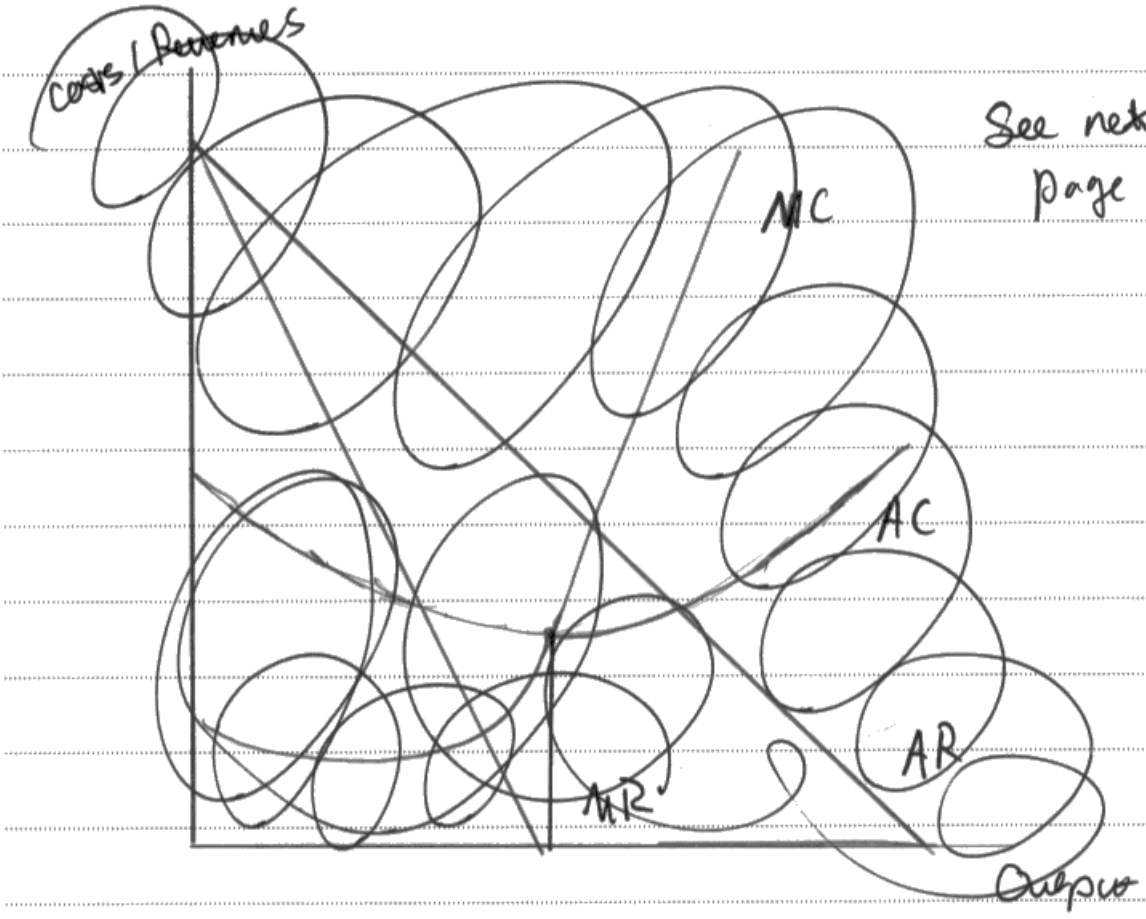
(1)

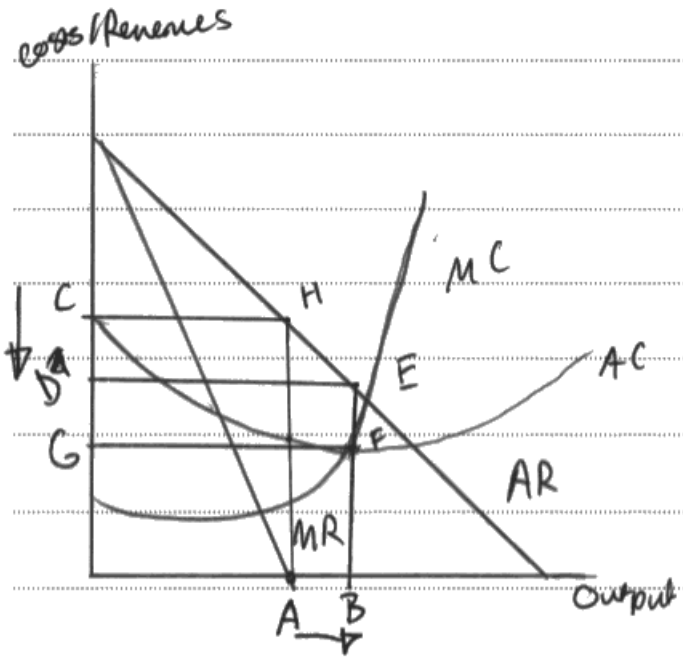
	Price	Output
A	rise	rise
B	rise	fall
C	unchanged	fall
D	fall	rise
E	fall	fall

Answer [D]

Explanation

(3)





The price will fall from C to D and the output will rise from A to B

At output A revenue is maximised.

At output B prof. is maximised

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Examiner Comments

Incorrect key

Diagram scores 1 mark (as revenue maximisation is correctly shown)

0 + 1

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Examiner Tip

Read the question carefully and don't cross out diagrams if possible to use – it is not about tidiness but answering the question. There is no clear improvement by redrawing it, but the opportunity cost is the careful reading of the question.

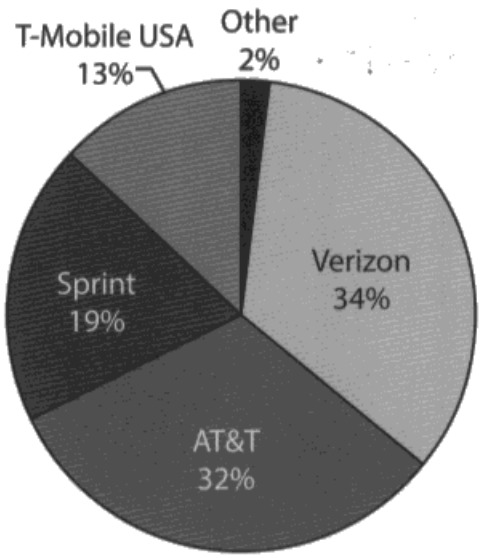
Question 5

Another very accessible question, with a mean of 3.58.
The very few candidates that chose the incorrect key had selected an answer involving monopolistic competition (A or B) and there is still a significant problem for some candidates in seeing the gulf between monopoly and monopolistic competition in terms of the characteristics of these firms.

Some candidates very effectively explained the interdependence between firms and the meaning of a price war by using a payoff matrix, although not required in this answer. It could efficiently pick up two marks, but it was not awarded where the payoffs didn't work logically, so candidates must be careful to check the numbers correlate with the decisions made by
each firm.

Here is a good example of an answer which fails to pick up the fourth mark, owing to a basic misunderstanding of market structures.

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 E

Explanation

(3)

An oligopoly is when a few firms dominate the market.

A price war occurs when one of the dominant firms may decrease the price of its good. This will cause an incentive for other leading firms to lower their price for a product.

Consumer surplus will increase.

Not A, There is more than one firm dominating the market.

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Examiner Comments

Correct key

Definition of oligopoly – 1

Explanation of price war – 1

Knock out of A is wrong as they have confused it with monopoly

1 + 2

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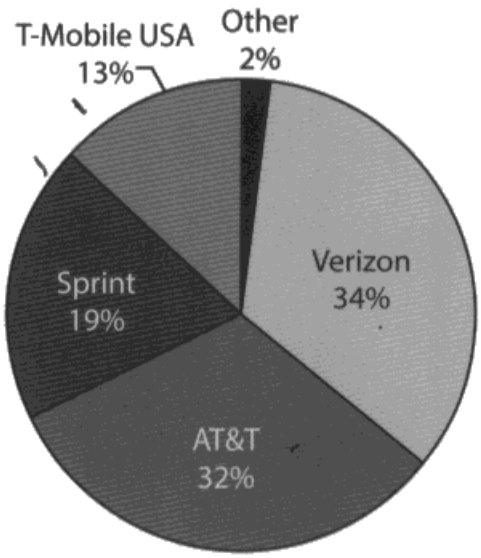
Examiner Tip

Learn the difference between monopoly and monopolistic competition.

This is a typical, strong response.

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



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(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 E

Explanation

(3)

An oligopoly is when there are very few firms in a market who dominate the market and each have high market power. This cell phone market has a 98% 4 firm concentration ratio making it highly oligopolistic, which means that when 1 firm reduces prices it results in a reaction from

other firms, eg. the T-mobile and Sprint price war.
D is incorrect as price war occur when interdependance is high so firms react quickly to other firms reducing prices

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Examiner Comments

Correct key

Definition of oligopoly – 1

Use of 4 firm concentration ratio – 1

Reaction from other firms is a price war – 1

Knock out of D/Interdependence – 1

1 + 3

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Examiner Tip

A logical, well-rehearsed answer picks up the marks.

Question 6

With a mean score of 3.6 (90%) this was clearly a popular and accessible question.

Most answers correctly observed that this was an example of price discrimination (1 mark) although there were other ways to earn the marks. The best answers included two diagrams showing the higher price in the relatively price inelastic sub-market and lower prices where elasticity was higher.

A huge number of answers incorporated a reason why people are prepared to pay more for food in the evenings, and the application was of great variety and interest to the examiners. Examples included that most people are working or studying during the day, and there is a limited substitute for eating in the evening when everyone is hungry.

The most effective knock out was to discount E with a discussion of the conditions of price discrimination – low or no arbitrage. Another common knock out was B saying the cost would be the same whatever time of day, but this needed a little more than just saying costs are the same – application to the context e.g. the fixed costs made this a more effective way to find credit.

This is an efficient, commendable answer.

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 A

Explanation

(3)

Inelastic PED < 1.

$PED = \frac{\%\Delta QD}{\%\Delta P}$

This is a form of third-degree price discrimination where firms charge different consumers different prices for the same product due to different elasticities.

This is to increase profit. as

The diff segmented markets here are before 6pm and after 6pm.

It's not E as market seepage would deter price discrimination.

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Examiner Comments

Correct key

Identification of price discrimination/PED formula – 1

Different elasticities required – 1

Knock out of E – 1

1 + 3

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Examiner Tip

The formula written in shorthand like this is perfectly acceptable.

The use of market seepage as a knock out is very effective.

This is a less successful answer.

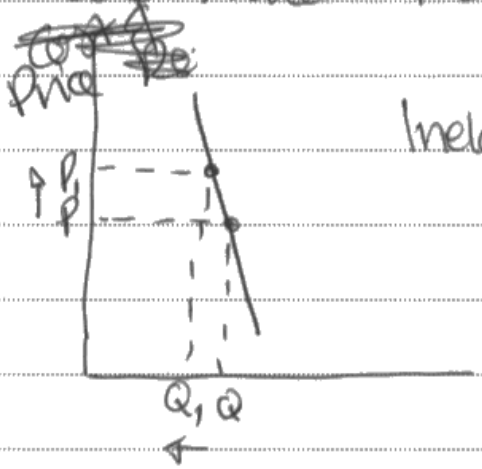
Answer A

Explanation

(3)

~~Price inelastic of demand~~

When demand is price inelastic it means a change in price would not effect demand much. Therefore an increase in price would not decrease demand as much. This is an example of price discrimination.



Price discrimination allow revenue to increase.

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Examiner Comments

Correct key

Price change would not affect D that much – 1

Identification of price discrimination – 1

The diagram does not gain marks as it does not identify the 2 sub-markets

The last sentence has no reasoning which adds to the answer – it would have been possible to develop this through the concept of inelastic demand or using the diagram.

1 + 2

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Examiner Tip

Diagrams are useful, but they must be made to work for you. For price discrimination always draw at least two sub-market diagrams.

Question 7

This question effectively discriminated between those who could distinguish external from internal economies of scale. There were many candidates who could identify the correct key but could not relate the benefits arising from the industry growth as a whole. Some answers were extremely vague, failing to attribute the cost changes to factors related to industry size. For example, the cost changes a whole industry might benefit from are a cut in corporation tax, but this clearly is not an economy of scale.

Many answers incorporated a diagram, but without the external concept (e.g. a downward shift in the LRAC) this was not credited.

The best answers included a benefit that might apply to the Tech Companies in the question, for example superfast broadband.

External economies of scale could be attached to an industry or a geographical area suiting a particular industry.

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

Explanation

(3)

– External economies of scale is when through increased infrastructure in an area cost decrease in the long run.

– This fall in external costs can reduce barriers to entry or exit and increase number of firms as seen in 2013 15,600 compared to 45 in 2009.

– It cannot be B as this would decrease or keep number of firms constant. However in this figure firms have increased.

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Examiner Comments

Key correct (1)

Definition has a sense of geographical area (1)

Application to infrastructure (1)

Barriers to entry reduced (1)

Knock out allowed (1)

1 + 3 = 4

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Examiner Tip

Examples which are related to the context (here, infrastructure) are particularly effective.

This is a typical answer where internal and external economies of scale are not distinguished.

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 [A]

Explanation

(3)

B is incorrect because if there were high barriers to entry it would be difficult for firms to enter the market. Economies of scale are factors that decrease a firm's costs as it ~~goes~~ grows and production increases. External economies of scale occur outside of a firm for example purchasing power increases which means raw materials become cheaper to buy and buy in bulk.

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Examiner Comments

Key correct (1)

No mark for definition of economies of scale, because this is awarded elsewhere on this paper (0)

Definition of external economies of scale is incorrectly applied to bulk buying and therefore we are not convinced this is external rather than internal economies of scale (0)

1 + 1 = 2

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Examiner Tip

Use the context and be precise in theory.

Question 8

This question proved almost as taxing as question 2 (mean 2.04, SD 1.35) and revealed a huge level of misunderstanding about real and nominal values. This question proves that economics involves thinking through concepts, not just rote learning.

For those who correctly identified D the rest of the marks were easy to find, usually though explaining what a price cap is and the distinction between real and nominal values. Most also went on to explain the reason for a price cap, for example as the need for regulation of the privatised utilities.

The main distractor was E, and this was rather worrying. It seems to be a basic economic skill to explain a change of 1% to 0% as a cease in rises rather than as a fall.

The second most common distractor was C. Conflating the concept of nominal as 'including inflation' and RPI + k as 'including inflation' seems to be the cause of the problem.

This was the most common erroneous response:

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 E

Explanation

(3)

• Regulators act as a surrogate for competition.
• Prior to the change rail firms could charge up to 1% on top of the RPI, this now decreases to RPI + 0 indicating the price is capped at RPI.
• Thus rail fares will fall to RPI as the 1% can't be charged.
• D is incorrect as the change in RPI price cap

means rail fares would have to be adjusted -

ResultsPlus
Examiner Comments

Key incorrect (0)

Role of regulator (1)

Function of a price cap "Rail fares will fall to RPI" (1)

0 + 2 = 2

ResultsPlus
Examiner Tip

Think carefully about what a 0% price change means.

Also consider that C or D must be correct as they are so similar to RPI + 0%.

This is an effective and efficient answer.

Answer D

Explanation

(3)

RPI is the measurement of inflation and the +1% accounts for any extra capital investment (RPI + K). K is difficult to measure. Nominal terms don't take into account inflation. Price capping is when a Government / regulatory body impose a maximum limit on the price of a firm.

ResultsPlus
Examiner Comments

Correct key K is the extra capital investment required/allowed – 1

Explanation of nominal terms – 1

Price cap is a limit on their ability to increase prices – 1

1 + 3

ResultsPlus
Examiner Tip

This was a straightforward question for a well prepared candidate. Although largely testing a Unit 2 concept (real and nominal values) this is effective in getting candidates to apply their understanding of economics as a whole.

Don't forget to learn RPI – X and RPI + K.

Question 9 (a)

As a part of the specification which had not yet been examined, it was pleasingly surprising how well the question was answered in some centres, but the mean overall was fairly low 2.44.

The main reason for monopsony was 'small number of buyers' provided alongside analysis of a 'large number of sellers'. In the specification the example given is of supermarkets, so many candidates felt confident enough in applying this in that way.

However there were the candidates who confused monopsony with monopoly and earned few marks.

Many gave a purely textbook answer, despite the clear instruction to relate the answer to the data (and two marks were reserved for application).

(a) With reference to Extract 1, explain **one** condition necessary for the existence of monopsony power.

(4)

Monopsony power exists when the market has one or a few number of buyers with significant negotiation power to get the lowest prices from there Suppliers.

One condition necessary for the existence of monopsony is a limited number of buyers. The supermarket industry is dominated with a few large firms that have a large negotiation power which gets them low prices from their distributors of bananas.

ResultsPlus
Examiner Comments

Theory

One/few buyers – 1

Significant negotiating power – 1

Able to get the lowest prices – 1

No application

Total = 2

ResultsPlus
Examiner Tip

Just saying 'bananas' isn't enough for application marks. You need to say which firms have buying power (supermarkets or distributors) and how this power has been acquired e.g. there is no substitute firm to whom to sell the bananas in such large quantities.

This is a model answer.

(a) With reference to Extract 1, explain **one** condition necessary for the existence of monopsony power.

(4)

A monopsony is when there is one buyer and many sellers hence the buyer has strong power over the sellers so can force them to sell at lower prices.

Extract 1 says 'large retailers are also using their purchasing power to force producers and distributors to absorb cost increases'. Extract 1 also demonstrates that profits have been shrinking 'dipping from 3.5% in 2004 to 0% in 2012', indicating the strength of the monopsony power.

ResultsPlus
Examiner Comments

Theory

One buyer – 1

Force them to sell at lower prices – 1

App

They have to absorb cost increases – 1

Shrinking profit margins – 1

Total = 4

ResultsPlus
Examiner Tip

It is always useful to say what happens to price. For a monopsony they are lower, for a monopoly they are higher than they would be in a competitive market.

Question 9 (b)

It was interesting to see so many answers incorporating a diagram, although this was not requested nor required as part of the specification. Clearly it can earn marks, as with any question where a relevant diagram is used. Note however that the question asked for effects in plural, so answers which just stated that prices would be pushed down and drew a diagram to show prices being pushed down were rather limiting the opportunity to gain marks.

Most answers quoted effectively from the passage that distributors would face lower prices and would have to 'absorb cost increases' from poor harvests, would merge (as Chiquita and Fyffes were planning) or leave the business. Many used the passage to discuss the need to diversify into melons and pineapples, as the text indicated.

This is an answer which uses the passage extremely well, but devotes none of the response at all to evaluation. There are four marks reserved for this.

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

(8)

Monopsony power is when their is 1 buyer on the market Because of this monopsony power it has led to decreasing profit margins of both banana suppliers of fyffes and Chiquita. Chiquita's profit margin dropped from 3.5% in 2004 to 0% in 2012 meaning they are now earning normal profit. fyffes profit dropped from just under 5% to 3.5%. However this is good for consumers. Due to the low price the ~~buyer~~ monopsonist is getting it may mean that the customers will also get low prices for their bananas

The large retailers are also using their purchasing power to force producers and distributors to absorb cost increases this may mean that because of the higher costs the banana distributor will have to shutdown in the long run as the AC > AR.

Supermarkets are now buying their bananas solely from producers instead of distributors which will decrease their revenue. Which will cause a loss of jobs for Fyffes and Chiquita. However because the supermarkets are paying less they will be able to invest and improve other services which they have.

ResultsPlus
Examiner Comments

Decreasing profit margins & data to support – 2

EV – customer may benefit from lower prices does not answer the question as not linked to distributors – 0

Forced to absorb cost increases & may have to shutdown in the LR – 2

Supermarkets buy direct from producers/reduces their revenue/lead to loss of jobs – 2

Last EV paragraph does not make sense (is not about distributors) – 0

Total 4 (as max KAA) + 0e = 4

ResultsPlus
Examiner Tip

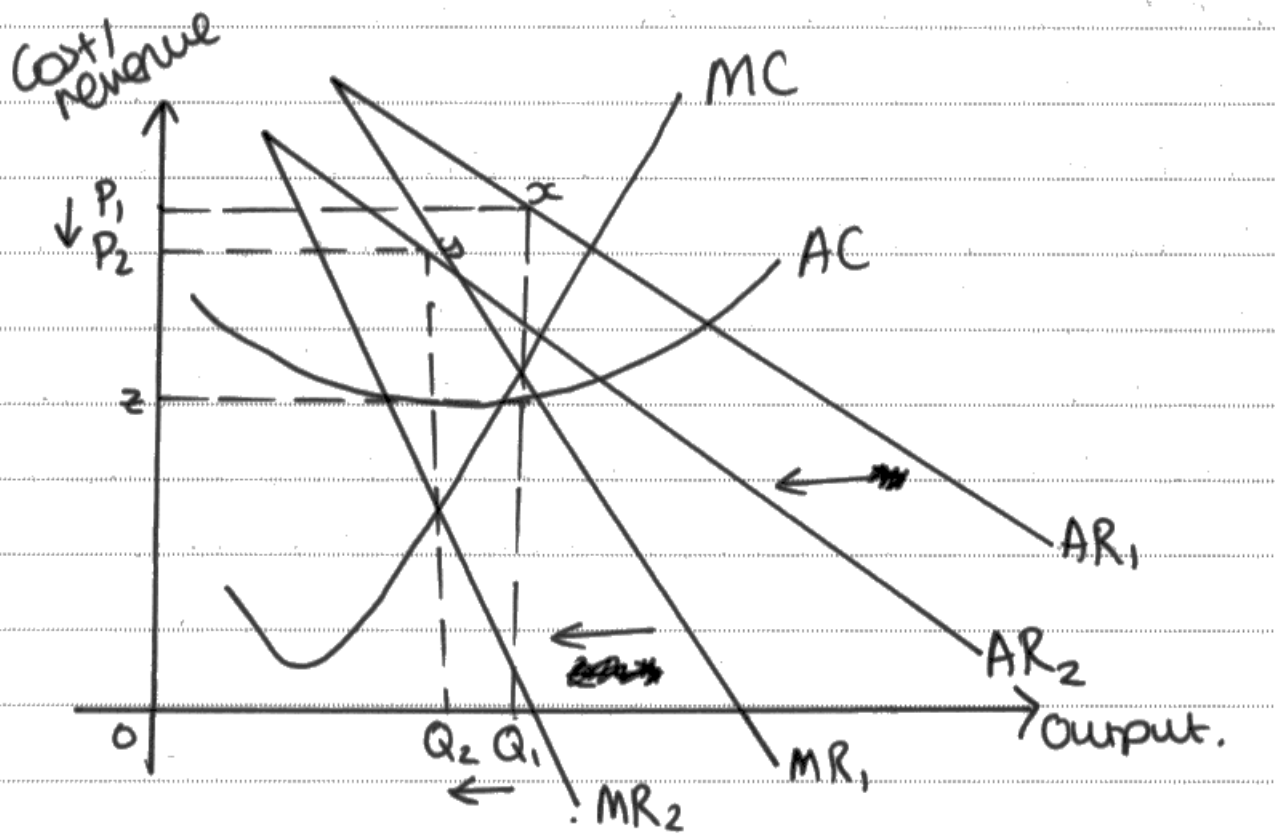
Look at the assessment objectives and their weightings very clearly for the new spec. These are fixed in stone and cannot change from one Paper to another.

This answer earned full marks. Notice how large and clear the diagram is, and although there might be some questions over it (discussed below) it adds value to the answer.

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

(8)

one effect of their monopsony power is to push prices down. The distributors must compete to get contracts from the supermarkets and in doing so must reduce their prices.



Their profits and revenues will fall from $OQ_1 \times P_1$ to $OQ_2 \times P_2$, and so will profits, As seen with Chiquita, who's profit margins have fallen from 3.5% in 2004 to 0% in 2012.

However the distributors may illegally collude, in order to keep prices artificially high and to keep profits and revenues high. This may mean that the monopsony

power has little effect as the distributors are agreeing to keep prices high.

Another reason profit may not decrease is if the Banana distributors are able to cut costs elsewhere, e.g. in transport. If costs fall, the lower prices won't effect profit levels as strongly.

ResultsPlus
Examiner Comments

Prices will fall, owing to competition for contracts (2)

Revenue and hence profits will fall, with data to support this (2)

The diagram supported the reasoning and there is therefore a clear 4 KAA marks here.

For evaluation, the firms may collude (2) or act to cut costs so that profits do not fall (2)

4 + 4 EV = 8

ResultsPlus
Examiner Tip

We have not been extremely fussy about the AC line not changing in the new profit area. Similarly, the AR/MR points joining mid-air is mathematically problematic, but using a diagram to support an answer can only ever add marks – we never take marks away.

Question 9 (c)

This was undoubtedly the most challenging data response question for 6EC03, probably for some years. These questions are satisfying in terms of discrimination and ease of marking – the precise wording of the question quickly reveals the range of ability.

The weakest answers focused entirely on whether the merger should be allowed to go ahead. There were some cases where the answer written for c and d were almost identical.

Most answers could identify the role of the regulator, and many were aware of recent changes to the now CMA increasing the powers and scope of the regulators (which was a useful route to earn evaluation marks).

The main obstacle for candidates was identifying problems that regulators might face, such as the international nature of the firms, under the jurisdiction of different regulatory authorities. This was the most commonly identified, along with regulatory capture and information asymmetry.

It would have been hoped that having identified three problems the answers would go on to say why these were not problems. For example, the supranational nature of competition policy, the penalties for collusion with the regulators and information symmetry. Many candidates examined whether the merger should be allowed to go ahead (which was credited as having at least some validity), discussed the increased powers of regulators, and commonly the damage that might be caused to international brands such as Chiquita if found to be acting against the public interest. However this approach was extremely rare, and the evaluation attempts tended to go off course.

This is certainly a commendable answer, and well above the mean of 5.97, but to gain more of the marks available it needed more problems and solutions regulators face – one at least – to give a broader answer.

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

(12)

A problem competition authorities may face when attempting to regulate the merger of firms distributing bananas is that their power may not span in all countries as Chiquita is based in the US and Fyffes in Dublin - so they may face this problem as both firms do not operate within one country.

However, if the competition authorities in both countries work together to regulate the merger it will stop any ~~interest~~ power

problems that are faced when regulating internationally.

Another problem is that the competition authorities there may be assymetric information, as both firms may lie about the value of their assets or profit earned – this may prevent the competition authorities from regulating the merger to the best of their abilities.

However, since both firms are very large and private companies they must publish all accounts – this will prevent the firms from lying about their asset values or profits. This will allow the authorities to receive all information needed to regulate the merger.

ResultsPlus
Examiner Comments

Role of the regulator implicit – 1

Based in different countries argument – 2

EV – authorities could work together – 1e

Asymmetric information & lie about value of assets & profits – 2

EV – must publish accounts – 2e

Total 5 + 3e = 8

ResultsPlus
Examiner Tip

Evaluation points need to be developed to a deeper level – one sentence is rarely enough. Take a point and examine it from many angles. Ram the points home, putting pressure from different viewpoints.

This was a far more typical response, with swathes of irrelevant material.

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

(12)

It is the role of regulators to look after the consumer's welfare, by for example by increasing the efficiency of firms or by regulating prices if they become too high

The merger of Chiquita and Fyffes will attract the attention of regulators because together their market share of banana distribution will be 29%. This is greater than the legal definition of a monopoly which is 25%. This may be considered too much power. However, a merger between Chiquita and Fyffes may be beneficial to smaller producers to combat supermarket monopsony power. Regulators must also try to make competition fair for smaller producers.

If Chiquita and Fyffes merged, producers that sell to distributors would face better working conditions and make at least a normal profit.

It may be difficult for regulators to make judgements due to a lack of perfect information available to them. They may not know how to decide on penalties

without knowledge of a firms costs or profits.

It is difficult for regulators to weight the cost to consumer welfare compared to the benefits to small banana producers because of the valability of banana prices, which are a comodity.

Competition authorities may decide that producer welfare for small distributers is more important than consumer welfare, because supermarket monopsony power means that consumers enjoy quality fruit at very low prices. These may also be social pressure to improve the conditions for producers in third world countries to acquire better living standards.

ResultsPlus
Examiner Comments

Role of regulator – 1

Next 2 paragraphs do not answer the question

Lack of information – 2

Hard to judge/measure consumer welfare – 1
No Evaluation

This answer does not address the question

Total 4 + 0e = 4

ResultsPlus
Examiner Tip

The key is to stick closely to the question.

Question 9 (d)

The enhanced difficulty of question 9(c) was balanced out by a very accessible and well answered 9(d). The mean was 11.58, over 2 marks above the equivalent question 10(d). 10(c) was over 2 marks over 9(c), so a very satisfying balance was achieved between questions 9 and 10 overall – the overall mean for question 9 was 25.96 and for question 10 it was 26.09.

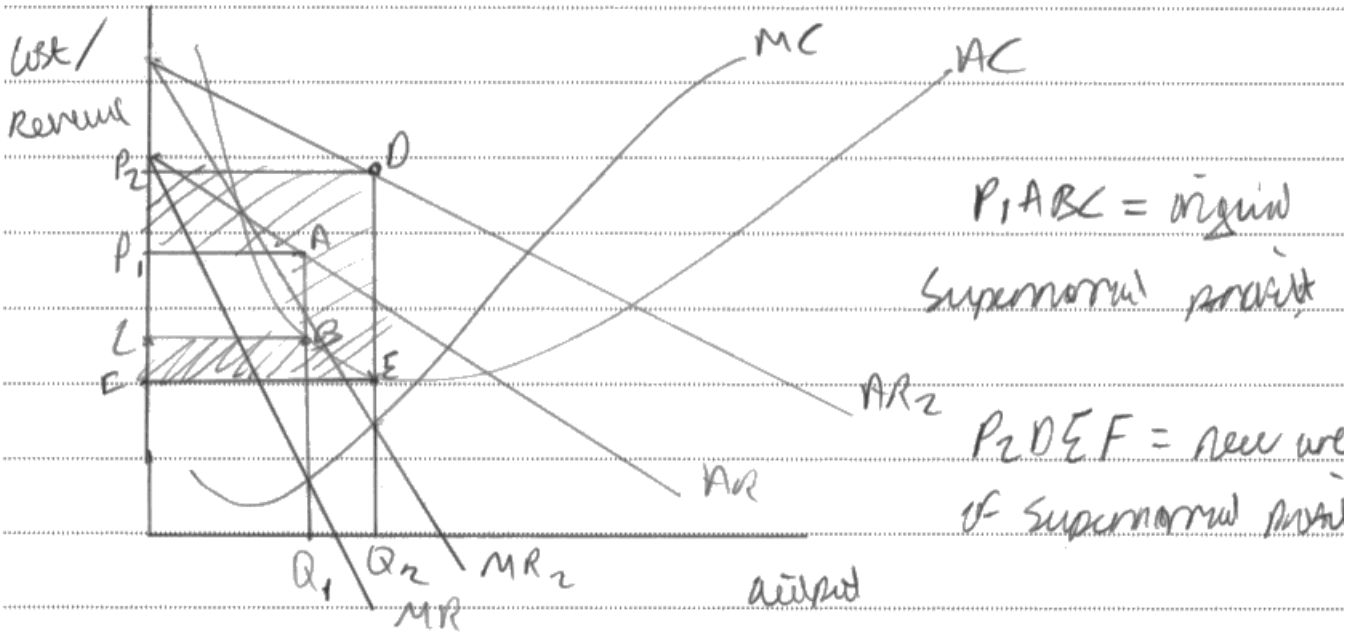
The reason that this question was so well answered was the opening up of the question to any benefits to any stakeholders, and the evaluation as any costs to any stakeholders. Furthermore it was permissible to talk about various types of economies of scale as separate points, and we allowed a wider range of diagrams (although still not allowing demand and supply in their simplest form).

Most answers gave three or four valid points, and a similar number of evaluation points, however the weakness tended to be that the evaluation points were not fully developed or applied to the context. It must be remembered that the skill of evaluation is higher order, and incorporates all the other skills such as application in order to reach the highest level of marks. This will be particularly useful to know in the new specification.

*(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)

One likely benefit of this merger would be an increase in monopoly power (i.e. it would have a 29% market share which therefore becomes a legal monopoly),



The increase in monopoly power ~~from~~ allows the Caribbean firm to set prices higher and with fewer competitors Supermarkets would be forced to buy bananas from longer firms thereby

increase shifting AR and MR to the right and increasing supernormal profit.

To evaluate such a merger leading to monopoly power could cause X-inefficiency. This is because with less of a threat of competition, firms can become ~~complacent~~ complacent and less incentivised to be efficient. This could increase production cost and hence price causing the merged firms to be less competitive, ~~leading~~

Another benefit of such a merger is that ~~they~~ the new firm can exploit economies of scale. This is because with ~~greater~~ ~~focus~~ the acquirement of each of the firms specialities and equipment, ~~production~~ ~~more~~ efficiency may increase allowing ~~LRA~~ ~~to~~ long run average ~~costs~~ to fall cost to fall and hence price allowing them to be more competitive.

Another benefit of this merger is that the ~~the~~ combined firm can adopt better pricing strategies to reduce contestability. Examples include predatory pricing where prices are set ~~below costs~~ very low so that new entrants ~~entrants~~ entrants find it difficult to compete with incumbent, therefore keep the industry. This keeps barriers high.

To evaluate this strategy encounters short run losses in revenue. Furthermore predatory pricing is illegal and is subject to fines which increase businesses costs.

ResultsPlus

Examiner Comments

Greater monopoly power & supermarkets may be forced to pay more for their bananas – 2

Diagram – AR/MR shift right + new profit area shown – 2

EV – risk of x-inefficiency occurring – 2e

Economies of scale + use of specialist equipment – 2

Ability to use pricing strategies to reduce contestability in the market – 2

EV – illegal – 1e Total 8 + 3e = 11

ResultsPlus

Examiner Tip

We have not been extremely fussy about the AC line not changing in the new profit area. Similarly, the AR/MR points joining mid-air is mathematically problematic, but we have been very clear in our marking as follows:

For one mark, draw the correct change or movement. This can be AR **and** MR as shown here. Or it can be a shift in costs, either AC (if a fixed costs change) or AC **and** MC (for a variable cost change). On an LRAC curve it is the rise in output corresponding with a fall in cost. It **must be in the right direction**, correlating with the shifts described in the answer given by the candidate.

For the second mark the **impact** (benefit or cost) must be shown. This tended to be the new profit area, but we allowed changes such as leaving the industry.

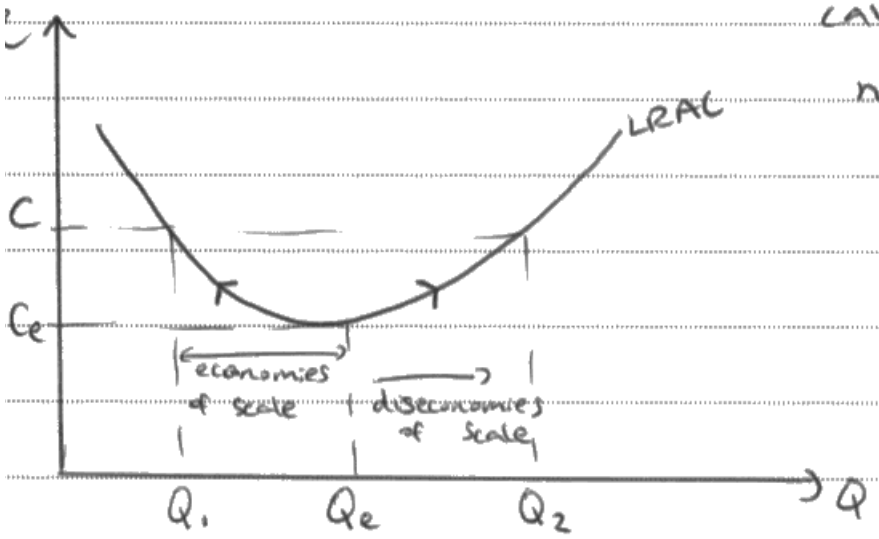
A systematic answer with a good range of points is likely to score well. The particular benefit of this answer is that it uses the passage again and again in making the points.

*(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)

Chiquita and Fyffes may experience technological economies of scale as they combine their operations and can afford to invest in new and advanced machinery this will increase their productivity, allowing them to distribute more bananas more efficiently.

However, this could result in diseconomies of ~~sca~~ scale as it becomes harder to co-ordinate all operations such as how many bananas are distributed and to where so long run average costs may rise, causing costs to rise from C_e to C. This would not be beneficial for the merger.



The merger between Chiquita and Fyffes would allow them to gain more monopoly power

as they would create a ~~ratio of 29%~~ 29% market share. This would give them more power to dictate the price of bananas to large super markets so they are less likely to be exploited.

However, 29% market share is not too large, especially since Dole has 26% market share without merging. This suggests that the merger may not increase their market power so significantly as large supermarkets still have a large degree of monopoly power.

The merger may also improve the efficiency of banana distributing as the firms are able to cut costs by having less workers to run operations. Furthermore, they will be able to employ specialists in areas such as finance and ~~even~~ to increase the efficiency of the firm and lower average costs.

However, there may be contracts in place for the workers that mean the company has to ~~pay~~ can only make them redundant which will increase costs for the firms instead and

will ~~reduce~~ result in less profits being made which is not beneficial. Furthermore, there may be a language barrier between workers as Chiquita is a US company whilst Fyffes is based in Dublin.

ResultsPlus
Examiner Comments

Technical economies of scale & use of new/advanced machinery – 2

EV – diseconomies of scale – 2e

Diagram showing economies of scale – 2

More power & less likely to be exploited by supermarkets – 2

EV – not a significant change in market power – 2e

Reduced costs boosting efficiency – 2

EV – higher costs due to redundancy – 2e

EV – language barrier between workers from different countries (not developed to say what the problem will be) – 1e

Total 8 + 7e = 15

ResultsPlus
Examiner Tip

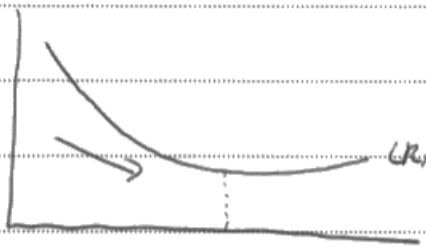
Develop the evaluation points, using data and supplementary analysis wherever possible.

Note that the diagram marks can be awarded as part of the KAA (benefits) and also the evaluation (costs).

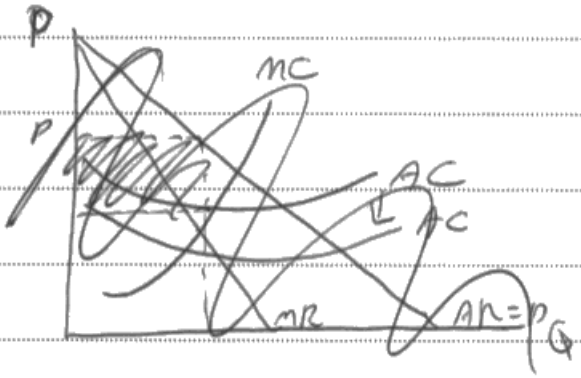
*(d) Assess the benefits that might arise as a result of the proposed merger between Chiquita and Fyffes. Use an appropriate diagram in your answer.

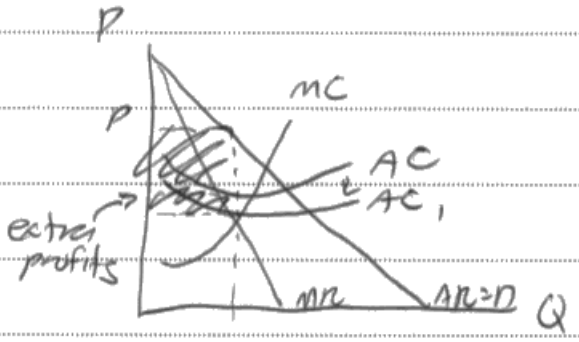
(16)

The most obvious benefit of the merger between Chiquita and Fyffes is economies of scale, which is a decrease in the new firm's LRAC.* A merger could reduce their costs of production and therefore allow the new firm to lower their prices to consumers. A decrease in production costs would also lead to an increase in profits, which is what they were aiming for as the two firms were experiencing a decrease in profits when they were separate.



Another benefit is increased market share. After they merge, they would have 29% (22+7) of global market share of banana distributors - this makes them a legal monopoly. This increased market share and monopoly power means that they are less likely to be exploited by other large firms (and supermarkets) like they used to. It also gives the newly merged firm more buying/purchasing power. They may be able to negotiate better deals that could push their costs down and increase their profits.





* The new firm would also experience technical economies of scales.

However, it is entirely possible that negative effects could arise from the merger. One would be diseconomies of scale, which can happen when a firm gets too large and there are managerial difficulties. This results in the firm becoming less efficient and as a result, the new firm could actually lose out on profits.

Also, because this merger would be an example of horizontal integration, there would be many overlaps in the new firm and many staff may have to be made redundant in order for the firm to become efficient.

Therefore, this proposed merger would not benefit many of the workers in the company as they could find themselves out of a job.

This proposed merger may benefit the newly merged firm, but it may not benefit other firms in the industry - for example, the producers. Extract 1 states that the "merger could only squeeze banana growers further". This implies that this proposed merger may only benefit Chiquita and Fyffes,

proposed merger may only benefit ~~the~~ Chiquita and Fyffes, but not the rest of the industry.

As the newly merged firm has over 25% of market share, they could potentially attempt to ~~act~~ operate as a cartel with other firms.

ResultsPlus
Examiner Comments

Economies of scale achieved (technical – see note on top of page 2) + explanation linked to lower costs & higher profits – 2

Increased market share & less likely to be exploited by supermarkets in the future – 2

Purchasing power to achieve better deals (purchasing economies) – 2

Diagram – lower AC + extra profit area shown – 2

EV – diseconomies of scale – 2e

EV – redundancy and the negative impact on staff – 2e

EV – bad for the banana growers – 2e

EV – The risk of a cartel forming – 1e (we felt this was an attempt to show the negative impact on the consumer)

Total 8+7e = 15

NB: LRAC diagram at top of page 1 would have only been worth 1 as it only shows a movement not an impact (this is irrelevant for this candidate as the diagram marks are fully awarded at the bottom of the page)

ResultsPlus
Examiner Tip

If in doubt add another diagram, and don't cross out diagrams unless contradicting earlier ones (cancelling out rather than evaluation, that is).

Question 10 (a)

The mean at 3.37 on a mark base of 4 makes this a question that candidates found very accessible.

The theory for this question was confidently explained by almost all candidates. Most said that demand was inelastic, there is no alternative, or explained monopoly/market power.

The data was rich in terms of evidence, and candidates clearly relished in the opportunity to quote from the passages. Most observed that the driver returning from Germany would get lost or gain extra miles, and therefore had no choice but to stay on the motorway. Many quoted this 15p extra per litre, and the distance between motorways.

The main weakness was that when asked to explain 'briefly', many candidates were far too brief in their application. There was so much information in the text and in some cases it was felt the data had not been read properly.

Many candidates provided far more information than required for a four-mark question.

(a) With reference to the information provided, briefly explain why motorway services operators can charge high prices for petrol.

(4)

Moto, Roadchef and ~~eclipse~~ Welcome break control ~~d~~ 37% of the market between them. They therefore operate in an oligopolistic market.

~~Firstly~~ motorway service operators can charge higher prices for petrol as they have price-setting power.

Motorists elasticity of demand for petrol is also likely ~~higher~~ lower when driving on the motorway, as they cannot choose & not fill-up if running low. Therefore motorway services can exploit this inelasticity of demand by charging higher prices. From extract 1, we hear a motorist chose a service station & fill-up as didn't want to need extra miles or get lost.

Captive market

ResultsPlus
Examiner Comments

Theory (Total 2 marks available)

Oligopoly (1)

Price setting power (1)

Inelastic demand (1)

Application (Total 2 marks available)

3 firm concentration ratio CR 87% (2)

Application to motorway, having no choice (1)

'Driving extra miles, etc' (1)

Captive market (1)

2 explanation + 2 application = 4

ResultsPlus
Examiner Tip

Never feel that you need to use all the space available. In this case there was a blank half page left available for those who wanted to draw a monopoly diagram (there were many of these) but it is certainly not a requirement to do this, and the full marks can be achieved in a very small number of lines, let alone overspilling into the white space as here.

A market structure was not required, but some theory on elasticity and discrimination here were very effective in scoring theory marks.

Numbers or quotes from the prose are equally valuable in terms of gaining application marks.

(a) With reference to the information provided, briefly explain why motorway services operators can charge high prices for petrol.

(4)

Motorway services can charge high prices for petrol because of price discrimination. They are discriminating on place as there are legal requirements of distance (15 miles), but they often exceed 50 miles. As a result, customers are forced to pay whatever the fee as the demand inelastic due to the little choice for customers, and the fact it is a necessity. As a result customers start paying 11.36% more than the average price.

ResultsPlus
Examiner Comments

Theory:

Price discrimination (1)

Little choice (1)

Demand is inelastic (1)

Application:

Higher price calculation (1)

Gaps between MSAs (1)

2+2ap=4

ResultsPlus
Examiner Tip

The use of numbers in your answer makes it very easy for the examiner to award application marks.

Question 10 (b)

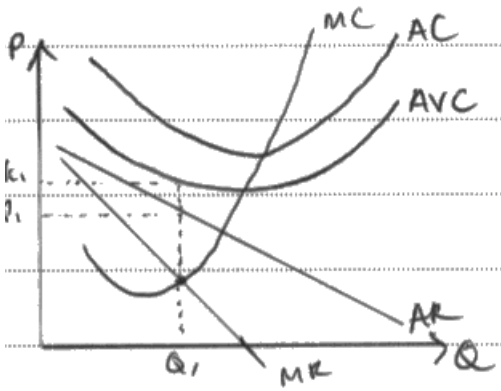
This question had almost exactly the same mean as 9(b) (5.6) even though there was a clear requirement to give two points. Also in a very similar vein there were many diagrams offered although not required, but a diagram could not replace a reason and just support it as part of KAA, so was not going to earn 2 marks per se.

Most answers discussed firms losing profits or going below shut down. Some impressive answers discussed short run contribution to profitability as a reason to stay in business as part of evaluation.

This is a very strong answer.

(b) Examine **two** possible reasons why a motorway services operator might exit the industry. ≥ AVC > AR & debt (8)

One reason why an MSA may leave the industry is if they reach their shutdown point, this is the point where their average revenue is not even sufficient to cover their average variable costs, let alone their average fixed costs.



At profit maximising level Q_1, & where MC=MR, firms earn make an average revenue of P_1, but average variable cost is higher than that, it is located at cost VC_1. This means firms may not even have enough to cover the costs of buying petrol, hence they won't have anything to sell to their customers, hence they're forced to shut down. However, it can be argued that AVC may only be higher than AR because the firm is profit maximising, if firms were to produce at a lower price there may be enough

demand (AR) to cover their AVC, in which case they wouldn't have to shutdown.

Another reason why firms may leave the industry is because they have accumulated a debt too high to be able to repay it. ~~Interest~~ Interest repayments can be a significant ~~variable cost~~ fixed cost to firms, especially if they have taken out large amounts of loans. After the 2008 recession, many firms have been forced to take out loans to finance their costs, building up even more costs for themselves. Extract 3 states that Welcome Break was at the edge of leaving the industry having accumulated a debt of "£376 million". However, one can argue that firms are in debt only in the short run and the investments on which most of their debts are spent (Extract 3 line 14) will bring in supernormal profits in the long run. As of July 2011, Welcome Break only has debts "in the range of £15 million and £78 million", a large improvement from its previous £376m in 2007. This suggests therefore that firms may sacrifice their short term profits to gain profits in the long run, so debts are not a reason for them to leave the industry.

ResultsPlus
Examiner Comments

Shut down point argument – 2

Shut down point diagram supports the above point (can now earn 3 KAA) but note two reasons must be given for the 4 full KAA marks.

EV Reducing price could bring in more revenue so they do not have to shut down – 2e
Debt burden – 2

EV Investment may lead to improved services and therefore long run profit – 2e

4 Max KAA + 4e = 8

ResultsPlus
Examiner Tip

A strong approach is to use some textbook theory, such as P<AVC. This can then be developed for evaluation as described above.

As with many 8 mark answers, there is a distinct lack of evaluation.

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

(8)

The first reason why a motorway Services operator might exit the industry could be because of the extremely high costs. For example having to be open 24 hours a day for 365 days a year (legal requirement to provide free parking for at least 2 hours, toilets, hot food and drink, etc. All very expensive costs that they have to keep up with. These costs could force a motorway Service operator out of the industry as they may not be able to afford to pay and continue paying them. However if they earn enough revenue is made these costs may not

seem as significant and could easily be paid off.

The next reason could be longer run by out competing them and forcing them out of the market. As there are some monopolies in this market they will have most of the control. They will set prices and ~~compete~~ engage in non price competition and could force out a smaller rival through advertising or doing some sort of deals with the consumer to attract them. This could force a motorway services operator to exit the industry as they wouldn't be able to compete with them, losing out on a lot of revenue and eventually leaving.

ResultsPlus
Examiner Comments

Extremely high costs & application to support point – 2

EV – revenue made should be able to cover costs – 1e

Aggressive behaviour of the dominant firms can force other firms out – 2

Total 4 + 1e = 5

ResultsPlus
Examiner Tip

The most effective evaluation is to turn the question around – why firms might **not** leave the industry.

Question 10 (c)

This question was interesting to mark because of the wide variety of thoughtful responses. For many candidates it was hard to find two separate points on the impact on profitability. The most effective way was to discuss the impact on demand and the impact on costs, but there was limited information on the cost of the motorway signs in the data, so other ways to do this was to consider the impact on different firms, those with the monopoly power and those which had been more competitive.

It was successful in terms of discrimination and ease of marking – the diagram question quickly reveals the range of ability.

On the diagrams we have been very clear in our marking as follows:

For one mark, draw the correct shift. This can be AR and MR as shown here. Or it can be a shift in costs, either AC (if a fixed costs change) or AC and MC (for a variable cost change). It must be in the right direction, correlating with the shifts described in the answer given by the candidate.

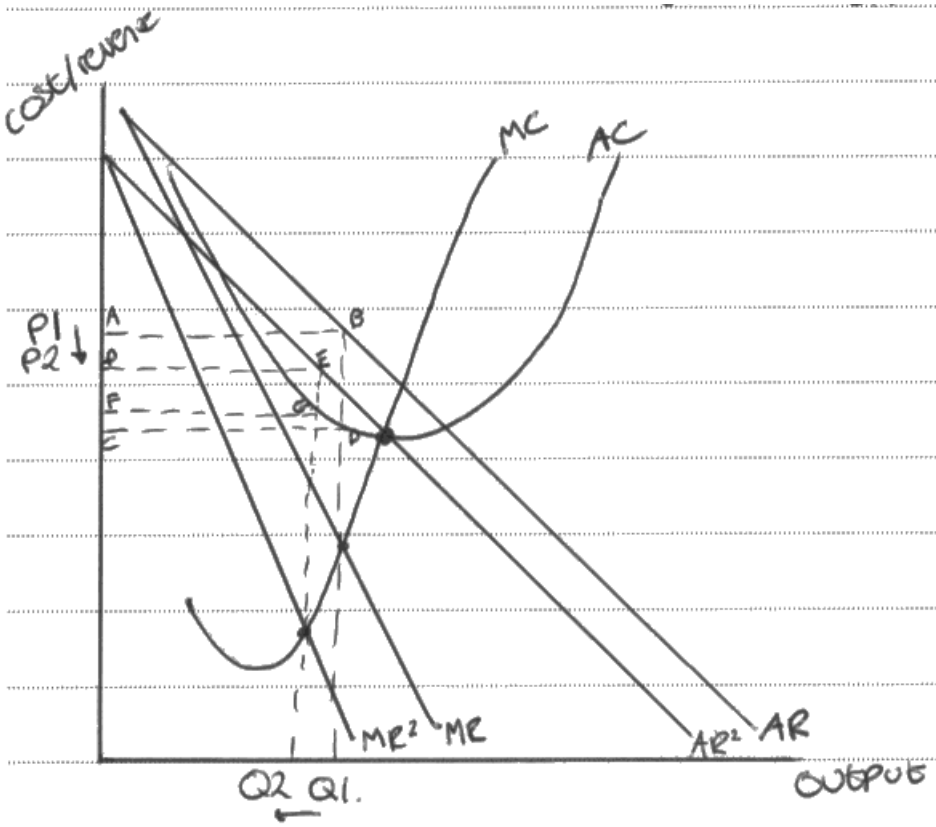
For the second mark the impact must be shown. This tended to be the new profit area, but we allowed changes such as leaving the industry.

This is a strong answer with good analysis and diagram, with three evaluation points. However the impact on profitability amounts to just one small point, worth 2 marks, which is in essence what the question is asking.

*(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)

This is likely to lead to a fall on profits for the firm as people will be made aware that petrol prices are significantly higher (15 pence above the average rate) which is going to put people off and contribute to a fall on demand.



SNP has fallen from area A, B, C, D to area D, E, F, G

However, there is no guarantee it will lead to a fall in demand due to the fact petrol is a necessary good and people may be forced to pay the higher prices if they are running low on fuel and there is not a cheaper alternative available near to the motorway services. In terms of the location there may not be another petrol station nearby and therefore considered the only option. (often the easily accessible

facilities for at least 15 miles.
There is no guarantee that it will contribute to a fall in demand by displaying prices or other outlets and it is difficult to measure how much demand has fallen by.

Also, consumers might trust the motorway service more due to non-pricing strategies such as loyalty card schemes which enable them to get a percentage off fuel prices.

ResultsPlus
Examiner Comments

Fall in profits due to greater awareness of prices – 2

Diagram – 2 (shift & new area)

EV Will not necessarily happen if there are no nearby alternatives – 2e

EV hard to measure by how much demand has fallen – 1e

EV Consumer loyalty argument – 2e

4 + 5e = 9

ResultsPlus
Examiner Tip

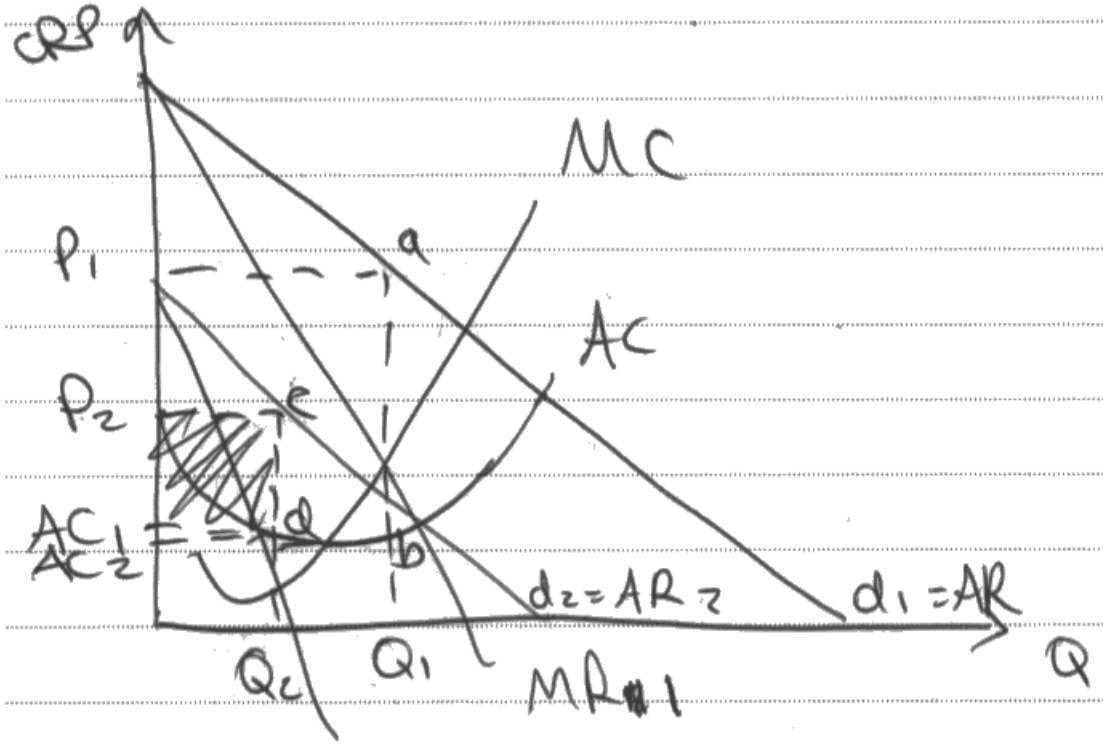
Answer the question as fully as you can.

A model answer.

*(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)

If a firm e.g. Moto must display Roadchef's prices or other motorway services, the demand for Moto's services may fall if consumers can see that they are the ~~most~~ more expensive option. Therefore $d_1 = AR_1$, a MR_1 falls to $d_2 = AR_2$ and MR_2. They profit maximise ($MC = MR$) at both MRs



At Q_1 price was P_1. SNP was AC_1 P_1 ab. Now at Q_2 and price P_2, SNP is AC_2 cd. There profits have fallen from this potential reduction in demand.

However the fall in demand may be less significant as if a car requires servicing they may stop at Moto even if it is the more

expensive option as if a car needs immediate attention it may not be able to wait due gap between MSAs which "often exceeds 50 miles" therefore demand will not fall significantly so the reduction in profits will be small.

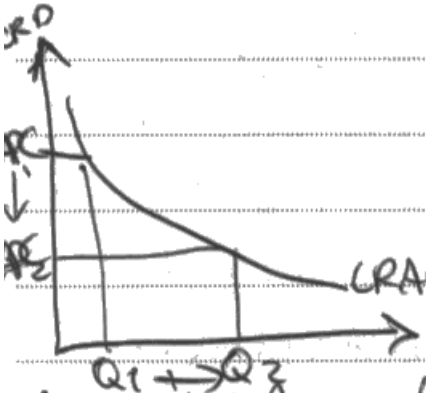
As now consumers are able to see and compare prices, MSAs must make their prices more competitive so it is likely that e.g. Welcome Break will lower their prices. This would reduce profitability as profits = TR - TC and TC would not change but total revenue (price x quantity) would fall due to their new lower price. Therefore profit margins would fall in this way.

However Roadchef could collude with e.g. Moto and ~~Rest~~ agree to keep prices high by pursuing a collusive equilibrium strategy to maximise joint rather than individual pay off. Therefore by doing this they would not have to compete on price so could keep prices high which is possible due to the oligopolistic

MOTO \ ROADCHEF	High price	Low price
High price	3, 3	4, 1
Low price	1, 4	2, 2

structure. Therefore displaying the prices of rival may not necessarily lead to lower profits.

Larger MSA firms e.g. Moto occupy a large, 39% share of the market. By being so large they can greatly benefit from economies of scale by e.g. investing in petrol pumps which reduce long run average costs as output



Therefore their costs are lower so they can charge lower prices to consumers than a smaller rival could. Therefore this would lead to higher demand for their services relative to more expensive rivals leading to higher profitability.

However as large services stations charge "£1.47 which is 1.5p above the average rate" it is unlikely that a large firm e.g. Moto is charging a low price despite having lower average costs. Therefore they are not translating their low AC into the prices they charge to consumers. Therefore their prices are unlikely to be lower than rivals therefore demand and thus profitability may not rise.

Overall I think displaying rival prices will reduce profitability as it increases competition in the industry as consumers can easily compare prices mean firms must be more price competitive so SNP would fall.

ResultsPlus
Examiner Comments

Decrease in demand and lower revenue – 2

Diagram (falling AR/MR and new profit area) – 2

EV – a car cannot wait if it needs petrol – 2e

Lower prices & lower profits – 1 (bit repetitive)

EV – firms may collude – 2e

EV Correct use of payoff matrix – 2e

Could benefit if their economies of scale show them to be the cheaper provider – 2

EV – unlikely they would be much cheaper based on the data (15p above average) – 2e

Total 6 + 6e = 12

ResultsPlus
Examiner Tip

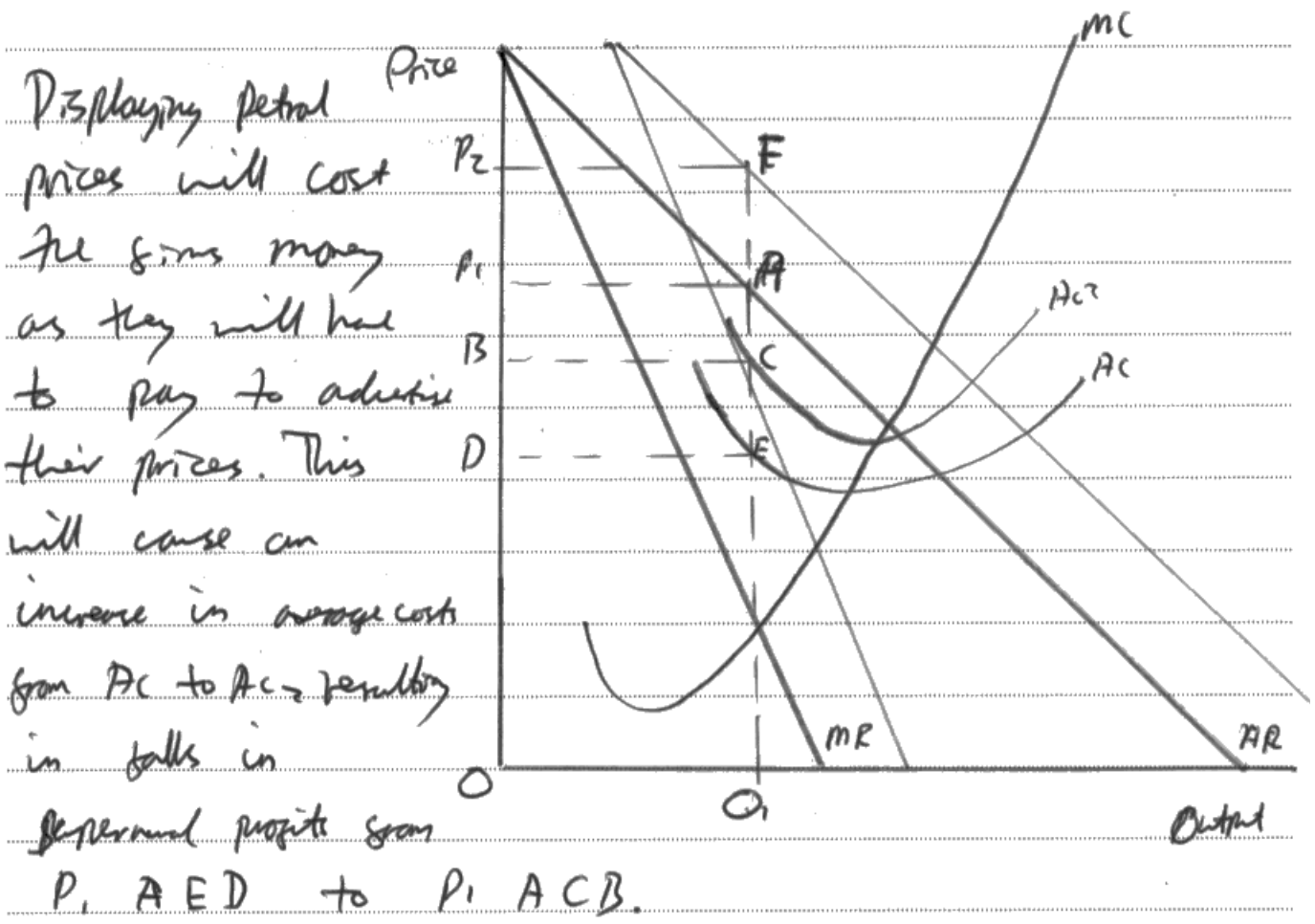
It is super to see clear diagrams, and a valid payoff matrix.

This example is included to show that fixed cost changes are also fully acceptable, but many candidates did confuse fixed and variable. The 'pay to advertise' is seen as an overhead.

*(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)

Displaying petrol prices will cost the firms money as they will have to pay to advertise their prices. This will cause an increase in average costs from AC to AC2 resulting in falls in supernormal profits from P1 A E D to P1 A C B.



However if they are able to use the advertising to advertise a lower price than the other firms then this may result in increases in revenue also. Therefore increasing their supernormal profit to P_2FCB.

Displaying prices may result in price wars as the operators look to reduce prices in order to attract customers. If this is the case then revenues will fall resulting in a decrease in supernormal profits.

However they may drive others out of the industry and gain size so in the long run they will be able to charge higher prices and make more profits. Yet this could be seen as predatory pricing which is illegal and can result in fines, increasing their costs and reducing profitability

ResultsPlus
Examiner Comments

Costly to advertise prices, which increases costs and decreases profits – 2

Diagram showing higher AC and new profit area – 2

EV – firms with lower prices could see revenues increase – 2e

Price wars will develop and revenues fall – 2

EV – long run firms will exit due to aggressive strategy/predatory behaviour – 2e

Total 6 + 4e = 10

ResultsPlus
Examiner Tip

If fixed costs change don't shift the MC. If variable costs change then do shift MC as well as AC.

Question 10 (d)

Well-constructed essays stand out easily from the poorly related lists-of-points. This is not an area well rehearsed by candidates, which largely explains the lower mean score (by over 2 raw marks) when compared to 9(d).

The better answers used the data available, for example by relating debt issues to entry barriers and also the use of the evidence to show that the firms could operate perfectly well whilst holding onto debt in the longer term. Other good answers used the evidence that there were high entry barriers in terms of regulations, but also observed that there are niche markets and things might change when regulation changes.

Weaker answers listed economies of scale without relating them to entry barriers, or repeated 10(a) on why monopolies can charge high prices. Some candidates used this question as an opportunity to talk about pricing and non-pricing policies at length, and although there was scope on the mark scheme for awarding this as a factor, it was too narrow a point to offer for the whole 16 marks

You can see from the plan that the candidate has rephrased the question as one on barriers to entry. It is unwise to narrow down a question.

*(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)

Barriers to entry.

↳ difficult to enter

↳ high sunk costs £24 mil WY

↳ Restricted supply - Extract 2 50+ mile distance

A major reason is the huge initial investment which is needed which acts as a barrier to entry for smaller firms to enter the market. Extract 3 states it cost Moto (the market leader) £24 million to open a new ~~co~~ station in West Yorkshire. This means that it is extremely difficult to initially get into the market due to the huge sunk costs which would occur from this.

Also, there are many regulations which need to be considered when building a new station which are expensive. This is not attractive to new entrants because of both the cost and also the time it would take to ensure all regulations have been accounted for. The problem with the time lag is that those starting up will have to sustain very high costs without any revenue being generated until it is open. This means that only huge companies with previous SNP are able to do so because they can cross-subsidise and cover the losses being made.

This is an example of an Oligopolistic market where only a few firms dominate the market.

There is a restriction of supply by the firms where there is huge distances between each station which means people have little choice on where to stop for fuel which makes demand more inelastic. This is a

purposeful & Stategy which acts as another barrier to entry for firms.

The running costs are very high because they have to be open all day everyday 365days 24hours per day. This means that they will have high ~~Average~~ fixed costs which is unattractive for new entrants. This is through having to employ staff to work night shifts which increase their pay due to unsociable hours, and also the electricity bill of keeping the station running 24hours a day.

The company needs to be making substantial levels of profit to be able to service the accumulated debt from the construction of the stations which is very unattractive because businesses do not like ~~uncertainty which could~~ uncertainty, especially when it comes to huge amounts of money.

ResultsPlus
Examiner Comments

Initial cost of the investment as an entry barrier – 2

Regulations deter new entrant – cost – 2

Time to comply with regulations – 2

Restriction of supply – 1 (overlap with regulation points)

High running costs – 2

Problem of servicing high debt – 2

No evaluation

Total 8 Max KAA + 0e = 8

ResultsPlus
Examiner Tip

This answer has no sense of discussion. The answer comes across as a shopping list.

This answer confuses sunk costs, and is too narrow. However it is one of the better answers seen.

*(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)

Moto, Welcome Break and Roadchef control ~~more than 85%~~ 87% of the MSAs market. One possible reason for this is that there are high Sunk costs, which would not create a contestable market. There are likely to be high Sunk Costs in this industry because the firms would have to buy/ rent the land along the motorway, they would need to build the petrol Station and have Specialist equipment so drivers can access the petrol. A firm would therefore need a high level of Start up

capital, something that new firms are unlikely to have.

There could also be a certain level of brand loyalty within the industry, representing a barrier to entry. A significant level of brand loyalty could mean that new firms entering the market struggle to obtain customers as drivers may go to the same station to get petrol everytime.

The [redacted] industry also has high overheads, with WelcomeBreak almost leaving the industry because of its £376 million debts. This could make the market less attractive for new entrants because of the lack of profitability, due to overhead costs but also regulation. This would make it easier for these three firms to dominate the market if there are few new entrants.

However, the high levels of debt within the industry may not be acting as a deterrant to new entrants. This is because the market produces high levels of cash. Firms can then use this money to just service the debt and are then still able to make a profit. It is not significant to most firms that they will never pay off the debt because they are still making a profit.

Brand loyalty may not lead to the high 3 firm concentration ratio in this market. As petrol is a homogenous product, it is likely to be price that firms compete on. The three firms dominating the market may just be more able to compete on price because they are more established.

I believe the most significant reason for 3 firms dominating the market is the high sunk

costs involved. These costs would make it difficult for new firms to enter because they need a high level of start up capital. This would lead to a low level of competition for these three firms, making it easy to dominate the market.

ResultsPlus
Examiner Comments

High sunk costs is applied to rent which is incorrect but we award high start up costs – 2

Brand loyalty to established firms – 2

Overheads and debt make the market less attractive to new firms – 2

EV – debt will not discourage all as there is plenty of cash in the market – 2e

EV – price is an important factor – 2e

Although the last paragraph looks like evaluation, it is just a summary. Sunk costs are not the strongest argument because the concept has been misunderstood – 0e

Total 6 + 4e = 10

ResultsPlus
Examiner Tip

The conclusion is not a summary or a repeat of points. It should be a chance to go back to the question, answer it and weigh up the issues.

Paper Summary

Based on their performance on this paper, candidates are offered the following advice:

- Read the question carefully. Missing a key word can change your mark by several grades.
- Time yourself carefully. There were many instances of candidates scoring the 4-mark questions several times over, then running out of time on the high mark-based questions.
- Choose the questions by the theoretical content of the questions, not the source material. In the new exams you will only have to choose on the essay questions, but in this paper the huge amount of data has clearly been a distraction for those candidates trying to make a choice.
- Try to avoid crossing out answers. If you are wrong it won't lose you marks, but if something is partially right it will score some credit. This is especially true when drawing payoff matrices and filling in tables.
- The data contains the answers. Use it. 25% of the marks are for application. We spend hours trying to make the data interesting and accessible to you, so are disappointed if you ignore it.

Grade Boundaries

Grade boundaries for this, and all other papers, can be found on the website on this link:

http://www.edexcel.com/iwantto/Pages/grade-boundaries.aspx

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