edexcel
advancing learning, changing lives

# Examiners' Report
# January 2010

## GCE Economics 6EC03


Edexcel Limited. Registered in England and Wales No. 4496750
Registered Office: One90 High Holborn, London WC1V 7BH

A PEARSON COMPANY

Edexcel is one of the leading examining and awarding bodies in the UK and throughout the world. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers.

Through a network of UK and overseas offices, Edexcel's centres receive the support they need to help them deliver their education and training programmes to learners.

For further information, please call our GCE line on 0844 576 0025, our GCSE team on 0844 576 0027, or visit our website at www.edexcel.com. If you have any subject specific questions about the content of this Examiners' Report that require the help of a subject specialist, you may find our **Ask The Expert** email service helpful.

Ask The Expert can be accessed online at the following link:

http://www.edexcel.com/Aboutus/contact-us/

Alternatively, you can speak directly to a subject specialist at Edexcel on our dedicated Business telephone line: 020 7190 5329

ResultsPlus is our unique performance improvement service for you and your students.

It helps you to:

- **Raise attainment** - by providing in-depth analysis of where your class did well and not so well, enabling you to identify areas to focus on/make improvements.
- **Spot performance trends** at a glance by accessing one-click reports. You can even choose to compare your cohort's performance against other schools throughout the UK.
- **Personalise your students' learning** by reviewing how each student performed, by question and paper you can use the detailed analysis to shape future learning.
- **Meet the needs of your students on results day** by having immediate visibility of their exam performance at your fingertips to advise on results.

**To find out more about ResultsPlus and for a demonstration visit**
**http://resultsplus.edexcel.org.uk/home**

January 2010

Publications Code UA022724

## 6EC03/01 January 2010

The performance was impressive across the range of ability for January 2010 6EC03, the first paper of the A2 new specification 9EC01. There was evidence that students were well prepared, and, with the exception of Question 8, knew what to expect in terms of theory.

There was a preference for Question 10 over 9 by a ratio of 4 to 1, with a higher level of understanding and performance on Question 10.

The mean was 47.4 and standard deviation 10.0. There were 3817 entries, compared to 6041 entries for Unit 6EC01. This suggests that many centres delayed entry until the Summer, owing to the synoptic nature of the specification, and also perhaps there was caution in entering as this was the first paper and there were few practice papers. The A grade was set at 53/72 with the E at 32.

The areas that answers revealed the strongest understanding were economies of scale, price discrimination and oligopoly. There was evidence that most students had learnt a good deal about game theory. The most disappointing areas were in the wider understanding of regulation on the new specification, and monopolistic competition

## General marking observations on Supported choice Questions

It should be made very clear to students that marks for knocking out the incorrect keys must include reference to the specific letter, for example, "It's not A because…". A valid reason must be provided for a knockout mark, and there is only one mark even if more than one key is excluded for the same reason.

There is a maximum of two marks for knocking out options on each supported choice question. This is because there are four incorrect options, and it has been determined that knocking out just a proportion of the incorrect answers is not tantamount to saying why the chosen key is correct. This explains the apparent discrepancy with unit 6EC01 where three marks can be earned for knocking out options, for there are only four keys on offer.

For the explanation of the supported choice questions, it was possible to earn three marks even if the key is incorrect, but only in relatively rare circumstances. These are times where the reasoning was fully correct but the key itself was not given, or was given incorrectly. If the key was incorrect it was unusual to award three explanation marks, for there was not sufficient evidence that the question had been understood. As with Unit 6EC01, all the marks are available (1 + 3) if the correct answer is chosen but the letter does not actually appear in the box itself, although this is not advised as best practice to students.

## Comment on Individual Questions:

### *Question 1*

**Mean 2.83**

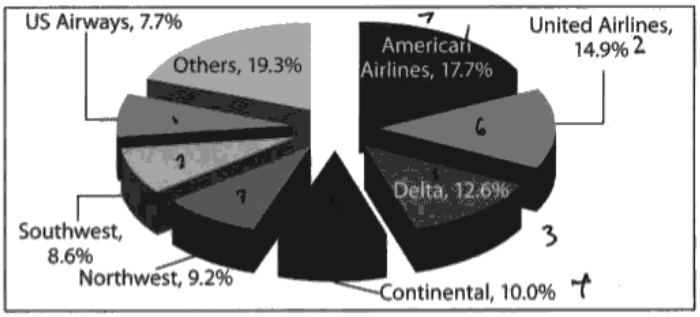
Most answers demonstrated a good understanding of concentrated industries and calculated concentration ratios accurately. Some did not discuss market share, but merely said there were many large firms. Some thought that having seven firms in an industry was enough to make it monopolistic. The most common distracter was B, with confusion over the characteristics of monopolistic competition. There was some good reference to the context, for example reference to the sunk cost of brand names.

There was extensive use of knocking out on this question. Those who calculated the four-firm concentration ratio could gain a mark for that, and then earn a mark for using this as a reason that A is incorrect. Options D and E were knocked out frequently, with extensive understanding of the term natural monopoly despite the term itself not being explicit on the specification, but coming under the umbrella of monopoly. In knocking out E there was the opportunity to define and apply the term 'sunk costs'.

1 Q01a

3 Q01b

**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 C

Explanation

(3)

A small number of large firms dominate the industry. With 4 firms holding 80.7% of market share CT = 80.7%. This means the industry is highly concentrated, a small number of firms with power. C4 = 55.2%. So the answer is not A. The diagram does not infer how sunk costs as many firms may enter the market and there is no reference to costs

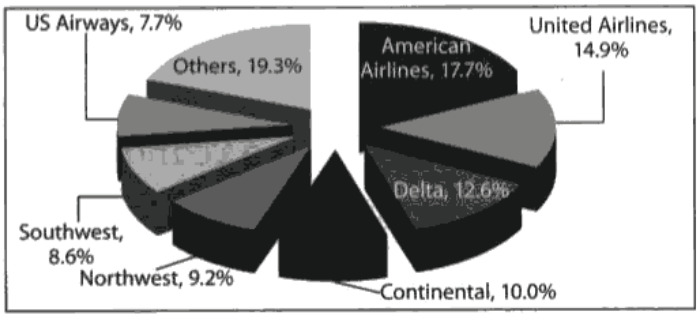
ResultsPlus
Examiner Comments

This scores 4 marks using the knock out.

1 Q01a

2 Q01b

**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 C

Explanation

(3)

The US airline industry is highly concentrated. As 4 firms concentration ratio are added up to 55.2% which is high concentration ratio.

concentration ratio: is the percentage of market share in each firm has.

**ResultsPlus**

**Examiner Comments**

But the above only scores 1 + 1 because there is only the CR calculation, and the definition of CR is not secure.

## Question 2

**Mean 2.84**

Most identified the correct answer, and used the term 'economies of scale', although there were many who failed to mention that the phenomenon is only applicable in the long run. The most effective way to earn marks is to give types of economies of scale, and refer them to the context, in this case airlines. Application of the term was often in reference to short run characteristics, and this becomes a significant teaching point when it comes to 10b.

Many were distracted by A, to avoid diseconomies of scale, which is explained by misreading the question or perhaps problems with the double negative in the key. Many chose D, largely explained by the confusion between contestability and concentration. The most successful knock out was C, with some observing that the Competition Commission is unlikely to rule on mergers that take place completely outside the UK, but most commonly it was argued that it was more likely to attract the attention of competition authorities than avoid it.

**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 [B]

Explanation

**(3)**

Economies of scale is when the scale of production increases and average costs fall. This happens in the long run, so average costs will fall in the long run. ~~They could~~ ✓ The could experience managerial economies of scale where larger firms hire specialist managers who are more efficient. It isn't D as by merging they are making the market more concentrated, making it less contestable.

**ResultsPlus**
**Examiner Comments**

This scores full marks: although it is not applied to the airline context, there are enough valid points from the markscheme.

## Question 3

**Mean 2.65**

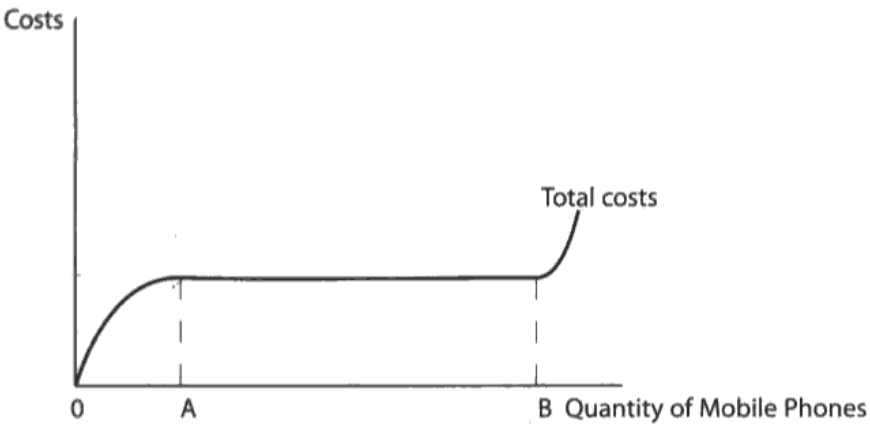
In general the answers were well done, with good understanding of the relationship between TC and MC, and many offering a convincing definition of marginal cost. There were some failed attempts at definitions of marginal cost that did not include a sense of change or 'one more unit'. The most common distracter by far was C, average costs are constant, and there is confusion by the fact that if TC is constant, TC/q is constant, which is clearly not the case if q is rising.

One problem many found was that it was hard to know what to say to earn all three explanation marks. Some attempted to add fixed costs to the diagram, without success. A far more successful line of enquiry was to discuss the average variable costs (falling) or the constant variable costs. The most impressive answer was one where MC was drawn in, falling to the x-axis up to point A and rising again after point B.

This is a question where using the context and knocking out incorrect answers are simple but effective tools.

**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 [D]

Explanation

**(3)**

Marginal cost is the addition to total cost when producing an extra unit of output.

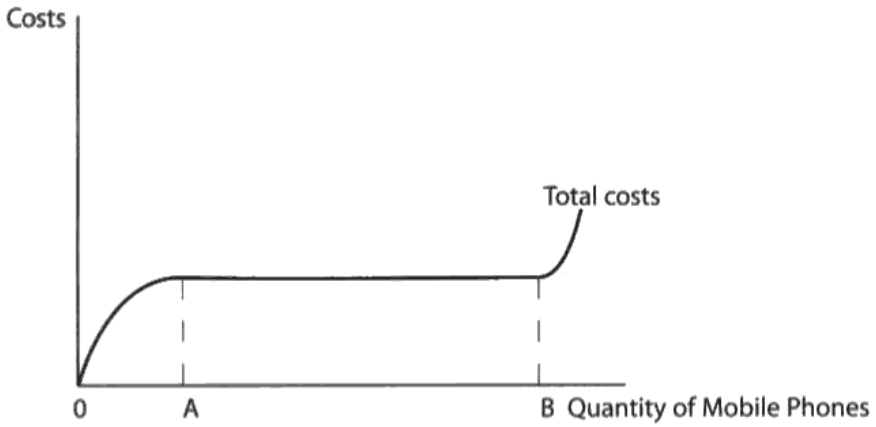
Average cost is total ~~output~~ cost divided by total ~~cost~~ output.

**ResultsPlus**
**Examiner Comments**

This just scores with the MC definition.

**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 [B]

**ResultsPlus**
**Examiner Comments**

This scores full marks, with definition, TC is constant, and a knockout.

Explanation

**(3)**

Marginal costs are the costs for producing the next product, therefore if over the range of output OA to OB total costs remain the same then marginal costs must be zero up until OB. This means that producing OA units is the same cost as producing OB units. It's not A, as Total Costs are steady between OA and OB.

## Question 4

**Mean (highest for SCQ) 3.48**

There were very few errors in answers to this question, although diagrams were often disappointing. Clearly a diagram showing the industry as well as the firm in both the short and long run is an effective way to address this question. The problems that were found in attempting this was to draw the long run equilibrium for the firm making only normal profits, and also marginal cost rarely crossed AC at its lowest point.

Answers understood the concept of perfect competition and applied it well to explaining the disappearance of SNPs in the long run. Answers that explained the dynamics of profits acting as signals, new entry undeterred by entry barriers, erosion of profits and the meaning of normal profit were often laid out effectively. It was a surprisingly large number of responses whish said that entry barriers were low rather than non-existent, and although this was credited it is not generally accepted as theory.

**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 [A]

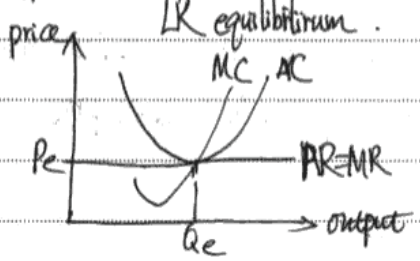
**ResultsPlus**
**Examiner Comments**

Good answers do not have to be long!

Explanation

(3)

In the short run, if a firm makes super normal profits, due to there is no barrier of entry in a perfectly competitive firm, new firms will be attracted into the market and exploit the super normal profit until it is all gone. Therefore in the long run, super normal profits would not appear.



## Question 5

**Mean 2.40 (second lowest SCQ)**

In a few cases, answers used an accurate diagram and some explanation to answer this question correctly, but the vast majority had a tick-shaped MC and many also showed AC as a curve. Some answers pivoted AR and MR which often made price rise (option D) and it is also possible to sketch the diagram correctly but with a small imprecision with showing the gradient of MR as twice that of AR, an incorrect conclusion could be drawn. In a sense this was therefore a weak question, as good technical drawing was required, but many intuitively realised that prices would be unlikely to rise in a period of falling demand, and used their understanding of the correct economic climate to see that firms do tend to cut prices, output and of course profits in an economic downturn.

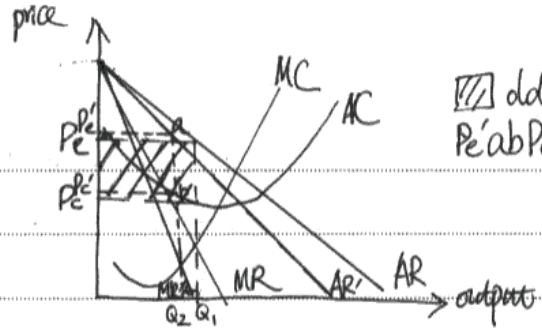
**5** A profit maximising monopolist facing constant average costs experiences a decrease in demand. Other things being equal, which of the following is likely to happen?

(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 D

Explanation




As there is a fall in demand, i.e. AR and MR shift to the left. As a result, output drops from $Q_1$ to $Q_2$, price increases from Pe to Pe' and profit falls.

**ResultsPlus**
**Examiner Comments**

Full marks can be earned even if AC and MC are not horizontal

## Question 6

**Mean 2.58**

The game theory question well done. Centres have obviously picked up on the inclusion of Game Theory in preparation for this examination, and in particular the Sample Assessment Materials provided a helpful steer. Very few answers got as far as explaining why the most likely outcome was D, however, even though revenue was lower, and there was confusion between revenue and profits. The best answers referred to collusion, trust issues, interdependency, Nash equilibrium and dominant strategies.

**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: A

Explanation

**(3)**

The grid shows Game Theory in practice, which shows it would be beneficial for both firms to set high prices and collude. As demand is price inelastic, the two firms can charge high prices without losing excessive quantity from customers. If they both set high prices, it is a 'win-win' situation and total revenue is maximised. However if Juju cheats and sets a low price to try and maximise its own benefits (maximax), or vice versa for APJ, then they will end up in D - the dominant strategy and nash equilibrium point where minimum revenue is achieved, so D is incorrect, as is B and C

**(Total for Question 6 = 4 marks)** **4**

**ResultsPlus**
**Examiner Comments**

This earns the marks many times over.

## *Question 7*

**Mean 2.59**

Drawing of the long run equilibrium point for monopolistic competition revealed two common weaknesses: an inability to identify a tangency between AR and AC, and difficulty in lining up this point with MC=MR. Some had rote learned it, but there was still some difficulty in applying this to the efficiency points in the question. This became an almost impossible task for those who did not show MC crossing AC at its lowest point.

The key related to inefficiencies, so merely defining the efficiencies was not a full answer to the question. It is important that the answers relate the model to the misallocation of resources.

There was a mark for giving at least one characteristic of monopolistic competition, which was in fact quite hard to earn for those many answers which took the model as being wither monopoly or competition. It is important to learn the distinguishing marks, such as differentiated products, and not similarities, such as MC=MR, 'branded products' or relatively inelastic demand, which could apply to several models. A very effective knock out was D, for many could argue that supernormal profits would be eroded.

**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

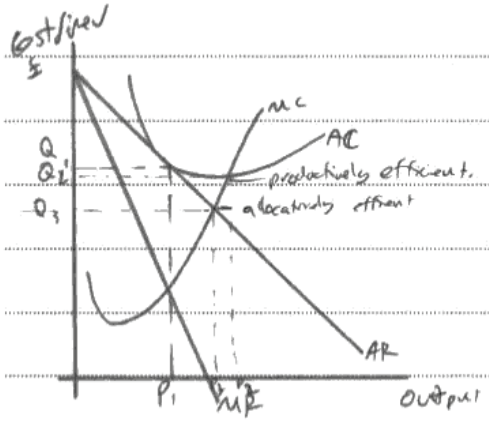
**D** making supernormal profits

**E** allocatively and productively efficient.

Answer C

Explanation

(3)




A monopolistically competitive firm will produce at normal profit, which occurs at AC = AR.

Productive efficiency is achieved at MC = AC and allocative efficiency is achieved at MC = AR, therefore a firm under monopolistic competition

will not be productively or allocatively efficient.
It is not D as a firm in long run
equilibrium under monopolistic competition only
makes normal profit.

**ResultsPlus**
**Examiner Comments**

This has an excellent diagram (2 marks) and earns definition and knockout marks.

## Question 8

**Mean 1.58 (lowest for SCQs)**

This was the most problematic question, in that it applies to the new broader remit of regulation which the specification now covers, and 'rate of return' is not a term that the students were expected to know specifically. The answer could be deduced from the stem, but the weaker responses usually opted for B – "Quality may decline…." which seemed logical if they did not actually think through the logic of the question. Many confused a profit cap with a price cap. Many chose A, although this is a reverse of the answer, assuming that the profit cap was in absolute terms rather than relative to capital assets as a percentage.

The most effective knockout was C, with many correctly deducing that a limit on profits would prevent unlimited profits!

**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 [A]

Explanation

(3)

This ~~method~~ method of regulation is a rate of returns form of regulation. As it is relating to capital assets firms may undervalue their assets so that their profits are not limited as much. It is not C as profits are limited so the firm couldn't make unlimited supernormal profits.

**ResultsPlus**
**Examiner Comments**

This has a sense of regulation and a knockout, so 2/4 marks.

## General marking observations on the data questions

In general, answers found Q9 difficult. There was a lot of confusion about what BAA is, the relationship between Ferrovial and BAA (Spanish ownership of a British-sounding company), who are the customers – airlines or airline passengers, and the difference between the Competition Commission and the OFT. It required close reading of the data and some general knowledge, as well as some sound economic theory, to score well. Answers were often stunted (especially 9b and 9c) and it was common to find there was no evaluation.

Question 10, by contrast, proved to be highly accessible. The issues surrounding horizontal integration proved easy to analyse and evaluate (Question 10b) with implications for Merck itself (10c) and its customers and employees (10d). Answers tended to be full and clearly evaluative.

A number of answers failed to glean from what was clear in the extracts that Merck is a *US* company and the *FTC of the USA* is the relevant regulatory body and, so, sometimes answered inappropriately. Whilst it is not expected that students have specific knowledge about competition cases and policies in every country, they must be willing to use the information provided and apply what they do know about regulation and competition authorities to cases outside the UK and EU.

## Comments on individual questions

### *Question 9(a)*

**Mean 3.13 out of mark base of 4**

A number of answers were understandably torn in this question, between whether the 'correct' answer was monopoly or oligopoly, and a few felt compelled to examine the case for each – an intelligent response (and usually very well executed) but which was more work than it was worth for the marks on offer. The opportunity cost of the four-mark questions must be remembered, and please note that there is never evaluation in the 4-mark questions.

Many failed to consider the context of the questions, that is, the airport industry in London. Instead, they answered more generally on the airport or even airline market. A number of answers who tried to use Figure 1 weakened their responses by failing to realise that the three biggest of the five London airports were owned by one firm.

Those who opted for 'monopoly' generally got two application marks as well as the two for theory, but those that chose 'oligopoly' struggled to back their choice with reference to the data, instead just giving a run-down of the characteristics of oligopoly. Given that the extract explicitly stated that there was one large dominant player in the market, no marks were given for oligopoly unless sufficient justification was provided.

(a) What does the information provided suggest is the market structure of the airport industry in London? Explain your answer. **4** Q09a

(4)

Market structure is the competitive environment in which firms operate. The information provided suggests that BAA owns 7 of the largest UK airports according extract on 1 and 3 of the London's airports, where demand is highest. The market structure is akin to ~~oligopoly~~ ~~competition~~ as there is little diggerence in the service offered between airports and there are many ~~firms~~ large firms dominating the market with BAA being the market leader.

**ResultsPlus**
**Examiner Comments**

A good answer, with plenty of theory 4/4 marks

## Question 9(b)

**Mean 6.92 out of mark base of 14**

There was a widespread tendency to write vaguely about 'consumers' when the customers paying landing fees are in fact other firms. In some cases there was mere replication of theory without applying it carefully to the context. Some credit was allowed for the impact on consumers as passengers, although to consider them alone restricted the marks. Better answers distinguished between the airlines as customers of the airports and passengers of the airlines, to whom the airlines might well pass on the higher cost of landing fees in their fares.

Many answers found it difficult to come to terms with the concept of increased competition. Some thought that fewer, larger firms meant that competition had increased, perhaps because market forces were intensified. Few marks could be awarded for this approach.

There were very few answers not attempting any evaluation at all, but there was an apparent need to outline what is expected for a 14-mark question such as this. For the 7 KAA marks, a simple identification or definition is expected, and three points for two marks each, or two points well developed and applied, up to three marks. A combination such as 3 + 2 + 1 marks is acceptable. For the evaluation up to four points, 2e + 2e + 2e + 1e, was allowed, but fewer points well developed could be awarded 4e + 3e.

*(b) Assess the case for increased competition in the airport industry. **5** Q09b

**(14)**

The airport industry is likely to be an oligopoly, in which the market is dominated by a few large firms.

In this industry, the capital cost for buying airports is high. The old firms have also earned their consumers' loyalty for their safety and quality. These ~~this present~~ new firms to enter the ~~market, therefore, are barriers to~~ These are barriers to entry, which prevent new firms from entering the market. In order to enter the market, new firms also have to spend resources on advertising, which is a sunk cost (a cost lost when leaving the market). This is a barrier to exit. Since there are high barriers to entry and exit, it is harder for new firms to enter the market, hence prevent competition.

However, the government can encourage competition between existing firms in the industry. The firms ~~are~~ will be encouraged to ~~reduce their cost~~ improve their efficiency to reduce cost, hence reduce the

price for landing. This is beneficial to consumers, which are airline companies in this case. Moreover, the airports owners may try to increase the quality and safety of their airports' services to attract customers. In this way, the airline customers are likely to gain benefits. However, there might be a case in which firm airports reduce their services' qualities to attract airlines or firms. In this case, not only the quality of services is but also the airline customers' safety is not secured

**ResultsPlus**
**Examiner Comments**

Mostly not relevant, but there is reference to airports' customers at the end and an evaluative attempt. 5/14

## Question 9(c)

**Mean 4.13 out of mark base of 8**

Many set out to answer a different question from the one that was set. Whereas Question 9b had asked about the case **for** competition, 9c asked how **effective** competition policy is. There were some good answers which referred to the 2002 Enterprise Act, but many confused the role of the Competition Commission with specific industry regulators and many diverted their arguments to discuss price caps.

Weaker answers were vague or confused about applying the role of the Competition Commission 'in industries such as the airport industry', and in particular using the information provided that the Commission was forcing BAA to dispose of Gatwick. It must be stressed that the generous time allowance for this paper is intended to allow students to read the material and reflect on it; a number of answers drew resourcefully on Extract 2 although weaker answers re-stated points (especially 'However the future of Britain's airports will be determined by regulation and planning rather than by competition'), without explanation or active application. This question provided the opportunity to use knowledge of the Competition Commission, although using the data provided was sufficient; only a small minority had anything further to add, and those who did were generously awarded.

Despite an 8- mark base, there were four marks for evaluation. An important teaching point to note is that all questions apart from the 4-mark questions are 50% evaluation. Problems such as regulatory capture were rarely discussed, but some did raise other issues which make regulation difficult.

(c) Discuss the effectiveness of the Competition Commission in regulating industries such as the airport industry. 4 Q09c

(8)

The competition commission is largely successful at regulating industries as airlines are still chosing to fly from certain airports and so on. However the airport industry is not so highly regulated as industries such as water or gas and electricity. These have price-capping formulas of RPI + K for water and RPI - X for gas, electricity and so forth. This 'X' is set by the regulatory body and stops exploitation of the consumer. However, there is no price capping in the airline industry, and compared to other markets and industries it is not regulated so well. There is always the danger with regulation that regulatory capture will occur. This is where

the firm being regulated and the regulatory body become too well acquainted and so there is ~~more~~ more lenience. Furthermore, asymmetric information can occur so the competition commission cannot do their job so effectively because they do not know everything about the industry's firms.

**ResultsPlus**
**Examiner Comments**

This is a case where price capping is used, in error. The evaluation is credited. Score 1 + 4e = 5/8

## Question 9(c)

**Mean 6.81 out of mark base of 14**

There were some very full and well-argued answers. A number were able to use the sub-market diagrams and elasticity/profit analysis of price discrimination theory to good effect although too many were unable to reproduce the diagrams convincingly and/or to apply them to Heathrow and other BAA airports.

A number of answers suffered from a lack of time to do justice to this 14-mark question, often because too long had been spend on parts 9a and 9b. However, None of these seemed to realise that, although the sub-diagram analysis could still hold good, this is not really a case of price discrimination as such (landing at Heathrow not being at all the same good or service as landing at Luton). Perhaps, those who did realise chose to answer the question differently; often, good marks were earned by other means.

The question was a good discriminator in that only the good answers appreciated the need to look at reasons and consequences, despite it being flagged by the bold type. Many found it hard to evaluate fully, and the 14 mark questions were particularly lacking in extended evaluative arguments.

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

(14)

~~This is an example of price discrimination as~~
By charging more for landings at Heathrow than other airports, BAA are ~~price discriminating again~~ giving consumers the option to pay more to land closer to London City Centre. This is possibly for businessmen to get faster access to and from the city and BAA know they are willing to pay higher prices for that service. This allows BAA to tap into the large consumer surplus and gain higher profits, causing a redistribution of income from consumers to shareholders.
However, this is an example of price discrimination, as consumers who want to land at Heathrow ~~to pay higher etc~~ but aren't going to London, have to pay higher prices for the same product. ~~This allows BAA to gain~~ Big which is unfair on consumers, as BAA can easily exploit them. O, the

other hand, this could lead to lower prices than normal at other airports as the increased profits at Heathrow ~~to~~ outweigh profits from these airports.

**ResultsPlus**
**Examiner Comments**

A brief look at causes and consequences, and just one attempt at evaluation. 5 + 2e = 7/14

## Question 10(a)

**Mean 3.03 out of mark base of 4**

Although arguments from Figure 1 were often made very well, it was disappointing that so many answers mistook 'market capitalisation' for 'market share'. Not just because of this, a number of answers showed only a flawed grasp of the concept of concentration ratios, which they correctly perceived as relevant.

(a) What does the information provided suggest is the market structure of the pharmaceutical industry? Explain your answer. **3** Q10a

**(4)**

This is an Oligopoly market. High concentration. High barriers to entry & exit. In an oligopoly there is a possibility firms may collude and fix prices. Therefore high prices for consumers. Figure 1 shows that there are 8 big drug companies in the pharmaceutical industry and they have a lot of the market.

**ResultsPlus**

**Examiner Comments**

Here the theory is sound but the application weak. 2 + 1 ap = 3/4

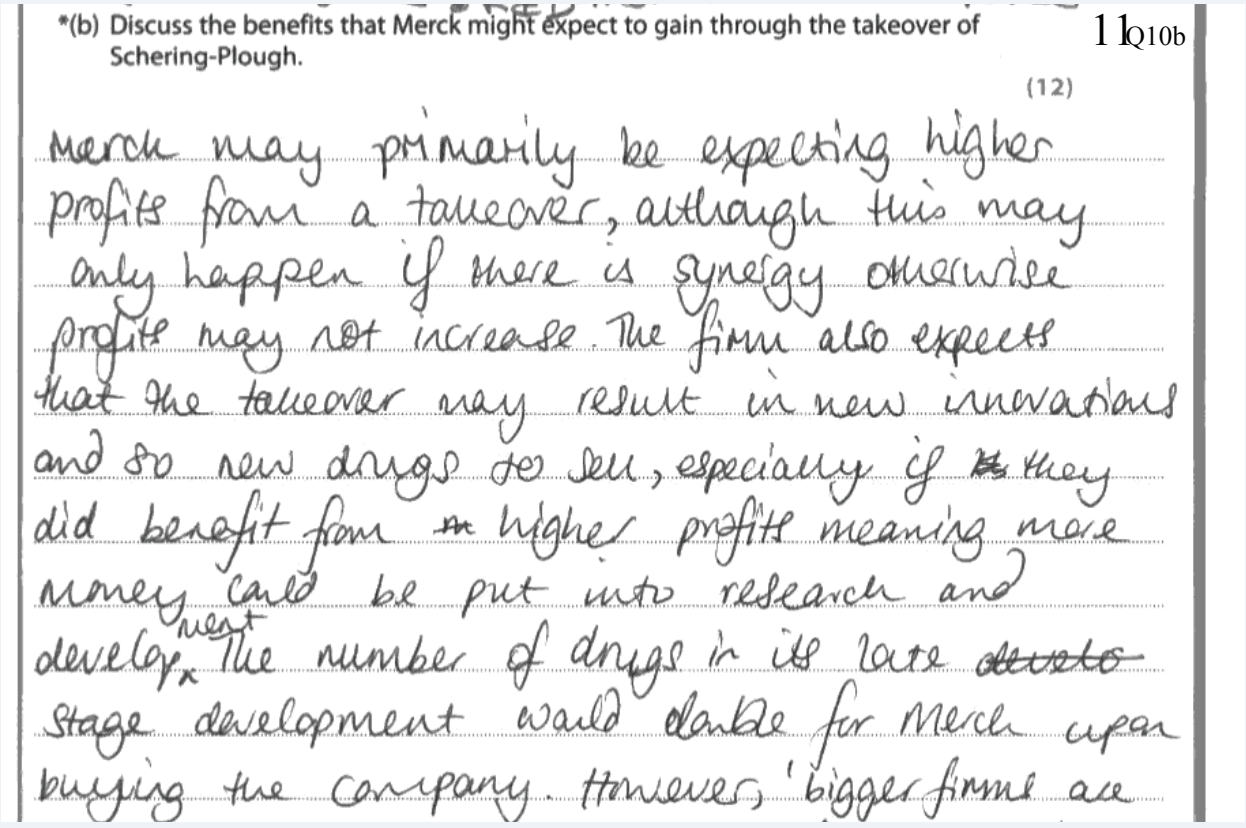
## *Question 10(b)*

**Mean 8.63 out of mark base of 12**

Mostly, answers had little problem with this question although some incurred the opportunity costs of digressing into the consideration of stakeholders in general whereas the wording of the question limits relevant responses to the shareholders (and arguably the employees) of Merck. Economies and diseconomies of scale, market share and market power, and the particular attractions of Schering-Plough were deployed effectively by many candidates. Weaker answers failed to realise that 'more sales' or 'more profit' would not in themselves count as an advantage unless they were to be 'more' in relation to the new combined market capitalisation or some such – a relationship for which there is no evidence in the extracts. Better answers developed 'more sales' and 'more profit' into well-argued points about economies of scale and market power, or used application in the context of the pharmaceutical industry, for example with reference to R&D and drug development. There was a worrying misunderstanding of economies of scale as a simple fall in average cost as output increases, without any concept of the long run. Managerial economies are not equivalent to rationalisation, and synergies are not simply cost cutting because of overlap of job description.

Relatively few answers gave explicit recognition to fact that the process of merger itself is not cost-free and that net benefits need to be judged against these cost, the possible divorce of ownership and control, and the danger that, depending on the terms, the takeover might, at least in the short term, benefit the shareholders of Schering-Plough at the expense of those in Merck.

Good understanding was shown, and even weaker answers were able to present a logical list of benefits for Merck. Where marks were not gained it was generally through weak or missing evaluation, or misreading the data. It was unfortunate that a few answers misread the labelling of Schering-Plough in Figure 1 as part of the bar itself and thought the merger would give the new firm the highest capitalisation in the market and so answered inappropriately as a result.



*(b) Discuss the benefits that Merck might expect to gain through the takeover of Schering-Plough.

11 Q10b

(12)

Merck may primarily be expecting higher profits from a takeover, although this may only happen if there is synergy otherwise profits may not increase. The firm also expects that the takeover may result in new innovations and so new drugs to sell, especially if they did benefit from higher profits meaning more money could be put into research and development. The number of drugs in its late stage development would double for Merck upon buying the company. However, 'bigger firms are

no better at innovation, and are often worse!
By increasing its size, Merck may benefit from economies of scale ~~long run~~ falling long run average costs, especially for risk bearing. Schering-Plough make 70% of its revenue outside the US and takes part in over-the-counter sales. With profit margins set to reduce due to health care reforms, Merck are making sure that they can still earn profit elsewhere. Also, they will benefit from more market share and so ~~not~~ more market power and they can worry less about the competition. In the long run, however, the company may have diseconomies of scale due to mismanagement of a large company. Also, the company ~~may~~ with new government may become regulated so they do not benefit from extortionate prices and so they lose their large profit margins. It depends where the profits go and how they are used whether the company gains.

**ResultsPlus**
**Examiner Comments**

This earns 12/12 before the end of the answer is reached!

## *Question 10(c)*

**Mean 8.20 out of mark base of 12**

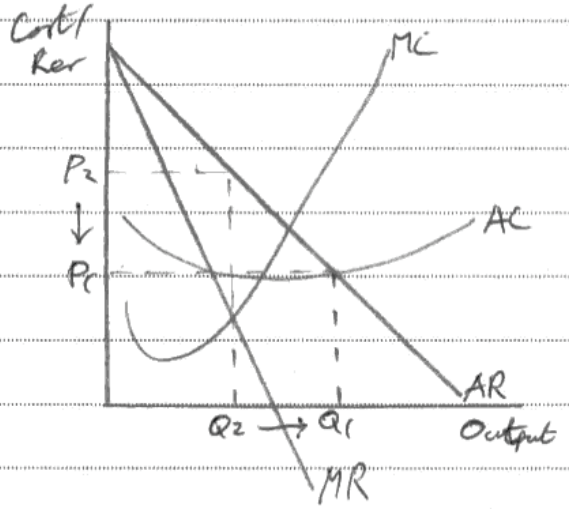
This was a question that the students seemed to welcome more than any other. An enormous variety of pricing policies was suggested, although given the wide choice it was surprising that so many used policies that they did not really understand. The most common confusion was between limit pricing and predatory pricing. While these are excellent choices, in that there is much scope for evaluation, it must be clear that limit pricing allows SNP and the incumbent has lower average costs than potential entrants, while for predatory pricing there must be the short term cutting of prices to below AC and long term raising of prices. The weaker answers did not give a policy but merely an action, such as cutting price, with limited economic analysis. The stronger answers discussed interdependence with other firms, such as price wars and the illegality of predatory pricing as opposed to other pricing strategies.

Advertising was the most popular non-pricing strategy. Only the better answers seemed to recognise the differences between over-the-counter sales, prescription sales, and sales for use by corporate bodies and government agencies, and the consequences these might have for pricing strategies and marketing. KAA marks were unlikely to rise above 4/6 when merely offering abstract theory unrelated to the pharmaceutical industry. The evaluation was usually that advertising is a sunk cost. Answers should be applied as much as possible to context, and development should have been extended beyond the very formulaic advertising answers, using as much economic analysis as possible. One major issue that could be picked up from the text is that medicines are largely sold to the NHS and private doctors, and a national TV campaign would not be appropriate in this context.

(c) Evaluate **one** pricing and **one** non-pricing strategy that Merck could adopt to increase sales.

(12)

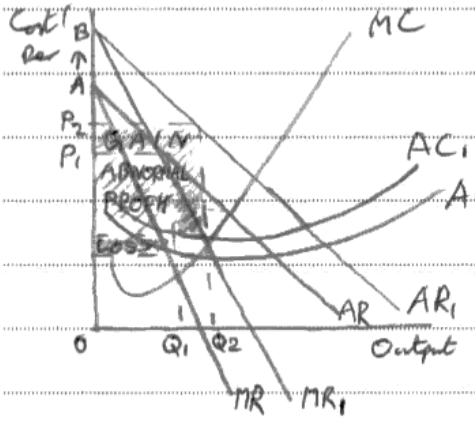
Merck could adopt a sales maximising price strategy where they produce at AR = AC.



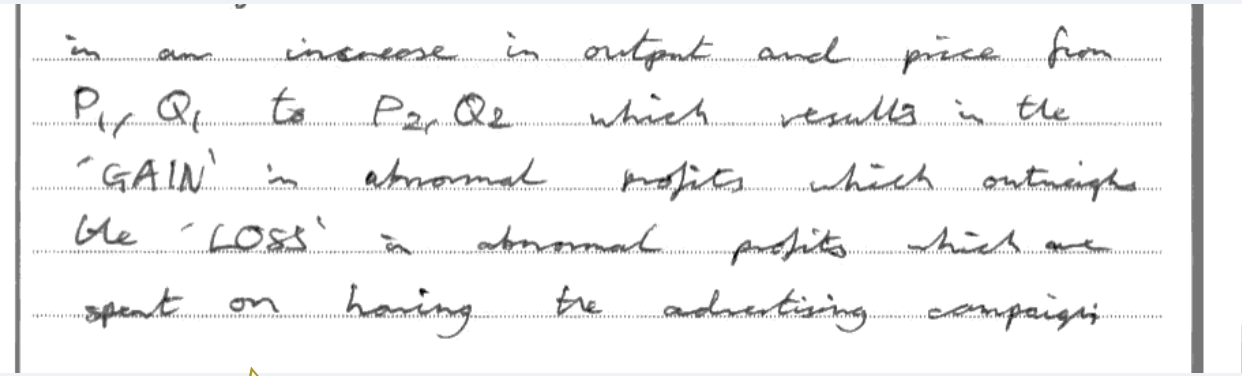

This will result in a large increase in sales as they will be selling each product at the cost it takes to produce. This means that the demand for the product will increase hugely compared to that ~~if~~ if they were selling at profit maximising MC = MR.

Selling at sales maximisation will increase the number of sales from $Q_2$ to $Q_1$ and this diagram shows that this will increase sales greatly. One drawback of this pricing strategy however is that Merck will only make normal profit in the short run and so will not have money to invest in product development. However it will enable them to build up a brand image which will benefit the company in the long run and enable them to make greater profits in the future.

Merck could also invest in a large advertising campaign to increase their brand image. The advertising campaign will increase their average costs from AC to $AC_1$ and as advertising is a sunk cost and so requires available funds to start with for a successful campaign.




However a successful campaign will result in demand increasing and AR to shift from A to B. This will then result


in an increase in output and price from $P_1, Q_1$ to $P_2, Q_2$ which results in the 'GAIN' in abnormal profits which outweighs the 'LOSS' in abnormal profits which are spent on having the advertising campaign

**ResultsPlus**
**Examiner Comments**

This earns full marks for sales max, but there is no eval of the advertising campaign, nor indeed a correct context. 8/12

## Question 10(d)

**Mean 7.62 out of mark base of 12**

Most wrote first about the dangers to each interest group and then evaluated these points with consideration of possible benefits. This approach required some flexibility in the application of a mark-scheme based on the wording of the question that had anticipated the reverse approach, 'be in the interests of consumers and employees', but with 50% of the marks available for evaluation, it did not affect the score whether the answer was 'for' or 'against'.

Many could identify factors that were in the interests as well as against the interests of consumers. The most common advantage was that costs savings might be passed on and those consumers would have more choice. The disadvantages were that the mergers would mean some lines of research were likely to stop and some products withdrawn, which is likely to limit their choice, but struggled with employees especially in seeing any possible benefits to at least some employees. AS with Question 10b, recognition that the customers are likely to be health service providers and not individual was rarely seen.

Also there was difficulty in applying the issues to *further* mergers in the pharmaceutical industry. The question proved to be a good discriminator.

*(d) To what extent would further mergers and takeovers in the pharmaceutical industry be in the best interests of consumers and employees?

(12)

12 Q10d

Further mergers and takeovers would benefit consumers in many ways. Firstly, they would gain lower prices through economies of scale. This is where as a firm grows they can reduce their long run average cost through methods such as bulk buying and specialisation. It is likely that these lower costs will be passed onto the consumer in the form of lower prices. However, there is no guarantee this will occur. The supernormal profit gained by the mergers may just be kept by the firms who because of their increased market share and subsequent monopoly power can keep their prices at the same level. Firms may also use their new monopoly power to reduce quantity to raise prices. This will in fact mean

consumers would actually face higher prices and welfare loss.

Employees may find they face less employment opportunities. As firms merge they will cut the clothing departments firing existing workers and reducing future employment prospects. However as the article says because firms produce very different drugs there may not be to much crossover and workers may not actually lose their jobs. They may also gain better pay as the increased profit of the firm is passed onto them. However it is again likely that the firm will keep this profit and give it to shareholders not workers.

Consumers also may gain more innovation. As the mergers will decrease costs through economies of scale, the firms supernormal profit will increase. This may be ploughed back into the company as investment. This may result in better quality drugs. However, the firms in the market are already very large, further takeovers may cause diseconomies of scale actually increasing long run average costs. This means profit would reduce and investment would actually fall for the company. Many consumers loose out on better drugs.

(Total for Question 10 = 40 marks) 38

**ResultsPlus**

**Examiner Comments**

A balanced answer. This is as much as we would expect at the top of A2 level. 12/12 marks

# Statistics

## *6EC03*

| Grade | A | B | C | D | E |
|---|---|---|---|---|---|
| Mark | 53 | 47 | 42 | 37 | 32 |

Further copies of this publication are available from
Edexcel Publications, Adamsway, Mansfield, Notts, NG18 4FN

Telephone 01623 467467
Fax 01623 450481
Email publications@linneydirect.com
Order Code UA022724 January 2010

For more information on Edexcel qualifications, please visit
www.edexcel.com/quals



Ofqual

Llywodraeth Cynulliad Cymru
Welsh Assembly Government

Rewarding Learning