

CAMBRIDGE A LEVEL ECONOMICS TOPICAL ESSAY QUESTIONS

MARKET STRUCTURE AND OBJECTIVES

PAST QUESTIONS

- 1. Discuss the extent to which monopoly producers and the consumers of their products might benefit from the existence of barriers to entry. [13]
- 2. (a) Firms in perfect competition and firms in monopolistic competition will only achieve normal profits in the long run. This means that firms in both these types of market structure are equally efficient.

Discuss, with the help of diagrams, the extent to which you agree with this statement. [12]

(b) Interdependence is a key characteristic of oligopoly firms. This creates a problem regarding the pricing decisions made by such firms.

Explain this statement and discuss the extent to which game theory can help to solve this problem. [13]

- 3. (a) What costs ought a profit-maximising firm take into consideration when making decisions about price and output? [12]
- (b) 'Price discrimination is always possible but never desirable.'

Do you agree with this opinion? [13]

4. 'A firm is fully aware of market conditions and its best rational interest would be achieved by pursuing the clearly defined objective of maximising profits.'

Consider whether this statement has any merit in different market structures. [25]

5. Loyalty and consumer behaviour

Consumer loyalty can be thought of either in relation to card schemes which offer discounts based on the amount spent with a specific retailer, emotional loyalty where customers are loyal to a particular brand, or as a monopoly loyalty where there is no alternative to the retailer or brand.

Retailers recognise that price has an importance in consumers' choice. Many supermarkets use loyalty cards to attract customers with promotions and price reductions available only to those who have a card.

By using cards, supermarkets seek a marketing advantage and attempt to build barriers between retailers. Research indicates, however, that although 70% of United Kingdom (UK) consumers hold some kind of loyalty card, only about 10% are loyal to one particular card.

Concerns have been raised that, when consumers are collecting points towards a particular goal, the loyalty card schemes may act as a constraint on free competition and prevent switching between brands. It is also thought that the costs of the scheme might be funded through higher prices. Further, the incentives and marketing discounts used by the scheme are often thought to be confusing and make it more difficult for the consumer to compare prices. There are risks for retailers too. It requires substantial investment to run such a scheme — one supermarket put the cost at US\$60m a year.

But how do loyalty card schemes fit into the context of the way in which consumers make choices? The relative importance of factors that influence consumers when choosing from which shop to buy groceries are one-stop shopping (43%), good service (22%), price (18%), the availability of a coffee shop (12%) and help with packing (6%). Loyalty cards come below these.

Companies who have invested in card schemes use them as a means to gather data on customers. When the loyalty card is used the retailer can see what the customer prefers to buy and can direct future offers to their wants in specific promotions both on-line and in the mail. Loyalty schemes are thus sometimes less about loyalty and more about understanding customers' wants.

The economic model of consumer behaviour using indifference curves assumes that consumers conduct research and buy products and services in a rational way.

However, many purchases are based on habit and consumer research is imprecise. When the consumer has a low involvement in research or a low emotional attachment to the product, there will be little loyalty.

Source: RSA Journal 1, 2001, page 83

What evidence is there in the article to suggest that loyalty cards make markets imperfectly competitive? [4]

- 6. (a) Explain what is meant by 'the principal—agent problem' and analyse why it is likely to be found in some market structures and not others. [12]
- (b) Explain what is meant by a contestable market and discuss whether a firm in a contestable market necessarily aims to maximise its profit. [13]
- 7. (a) Explain the difference between perfect competition and monopoly and, with the help of diagrams, distinguish between normal profit and supernormal profit, considering whether supernormal profit is possible in perfect competition. [12]
- (b) Firms do not always wish to maximise profits. Consider what alternative aims they might have and whether the idea of the Prisoner's Dilemma might be useful in their decision-making. [13]

8. Changes in the world oil market and their effects

Founded in 1960, the Organisation of Petroleum Exporting Countries (OPEC), consisted of five countries all of whom produced oil. OPEC's success, with Saudi Arabia as its market leader, encouraged other oil exporting countries to join. There are now 12 OPEC member countries, including Iran, Nigeria and Venezuela. OPEC is responsible for over 35% of world oil production, working together to fix prices and control output.

OPEC has faced various external shocks. In recent years, the financial crisis 2008–2011 reduced global demand for oil. Also, since 2012, non-OPEC oil supplies have increased, as shown in Fig. 1, mainly due to the use of fracking – a process of extracting oil from rock using very expensive drilling equipment. This has happened in spite of opposition to fracking by environmentalists who accuse the fracking companies of causing minor earthquakes and polluting underground water sources.

The main oil producer using fracking is the United States (US) which has become almost self-sufficient in oil and consequently does not need to rely on OPEC. In 2014, the US even began to export its oil, especially to Europe as a rival to OPEC and Russia. This had an effect on the price of oil as shown on the chart in Fig. 2.

There have been both winners and losers from this change in production of oil. While all oil importing countries have become winners as the price of oil declines, undoubtedly the US has strengthened its economy the most. The fracking boom has increased consumer spending in the US, which has been a key element in the recovery of the US economy from the financial crisis.

The losers are OPEC's members that are dependent on oil as the main source of revenue. Nigeria greatly overestimated the price of oil and, as a result, it had to devalue its currency in November 2014, raise taxes on luxury items and cut government spending by 6%.

Fig. 1 Supply of oil 2012-2015

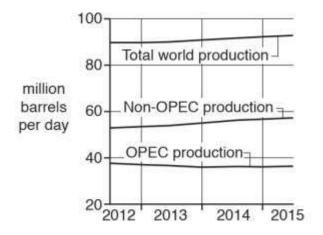
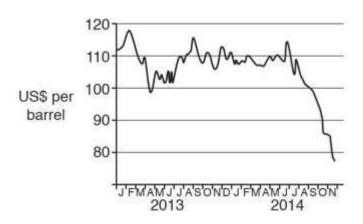


Fig. 2 World price of oil 2013-2014



Despite the fall in oil prices, in January 2015 Saudi Arabia refused to agree to demands from other OPEC members to cut oil supplies in order to keep prices high. Saudi Arabia was happy to allow oil prices to fall further in order to put US fracking companies out of business.

Source: The Times, 5 December 2014 and 7 January 2015

- (a) Define what is meant by a cartel and explain why a cartel might be formed.
- (b) What evidence is there in the information that OPEC is a cartel? [4]
- (c) Given the information above, analyse with the help of an appropriate diagram whether the overall price change shown in Fig. 2 is consistent with what would be expected in the market for oil. [5]
- (d) Is there any evidence in the information that might lead to the conclusion that the US economy is a winner in the short run but could become a loser in the long run? [8]
- 9. 'In a complex modern economy there is no possibility of a perfect market system. A concentration of market power always results and does not serve the public interest.'

Do you agree with this opinion? [25]

10. 'The theory of the firm that assumes perfect knowledge and the aim of profit maximization can be found only in perfect competition. In monopoly those assumptions do not apply.'

Consider whether you agree with this statement. [13]

11. A fuel shortage slows India's economic growth

India has struggled to provide enough electricity to power its industry. New power stations have been built but the country cannot get enough fuel, mainly coal, to run the power stations. About 55% of India's electricity is generated by the use of coal. India has one of the world's largest reserves of coal but has not been able to exploit it. The state-owned Coal India, which has a monopoly control of 80% of production, is required by government policy to sell coal at a 70% discount below the market price.

There has been almost no new investment in coal production by either the Government or the private sector according to industrialists who struggle with the daily loss of electric power. Coal production increased by 1% in 2012 while electricity-generating capacity increased by 11%. Some coal is imported but this has now become very expensive as India's chief supplier, Indonesia, has doubled prices of its coal.

Attempts to open new areas to mining have met with strong opposition from environmental regulators who have blocked the plans because, it is claimed, the development would destroy dense forests.

The electricity sector's problems have contributed to a second year of decreasing economic growth for India. The growth rate was 10% in 2010 but only an estimated 7% in 2012. A complex system of price controls has resulted in retail electricity prices being lower than the cost of producing power, which has caused large losses at state-owned electricity-generating industries.

Businesses report that frequent losses of electric power have forced them to lower production and spend significantly more on diesel fuel to run back-up generators. Analysts say that the reduced rate of economic growth could have been avoided if policymakers had addressed the problems of electricity shortage, weak infrastructure and restrictive regulations.

The gap between demand and supply for electricity increased between 2010 and 2012 as shown by Table 1.

Table 1: Electricity use in India, 2010-12

	Excess of electricity units demanded over units supplied 2010–2011	Excess of electricity units demanded over units supplied 2011–2012
Normal use	8.5%	10.3%
Peak use	9.8%	12.9%

Source: Adapted from The New York Times

Consider whether the above evidence about Coal India conflicts with the economic analysis of a monopoly. [5]

12. Explain why manufacturers differentiate their products and describe the characteristics of two market structures where product differentiation occurs. [12]

13. Supermarket power

One supermarket chain in a European country is responsible for about 30% of the market share of grocery sales. Recently its strategy has been to open smaller supermarkets in local areas rather than concentrate on large stores on the edge of towns. The expansion in local areas is not always welcomed.

Residents miss the diversity of different types of shops, farmers and suppliers complain that the supermarket pays little for their products, and small local shops fear its growth. A senior manager from the supermarket agreed that suppliers were made to suffer the main effects of the economic recession as the supermarket insisted on substantial reductions in prices from its suppliers. The supermarket gains the benefit of bulk buying and the large sales to the supermarket are a major source of revenue for the suppliers.

However, if the supermarket were to cancel its order it would leave the supplier facing difficulties. Suppliers sometimes, therefore, have little choice but to reduce their prices. The supermarket is able to act as a monopsonist, particularly when purchasing supplies from meat and poultry farmers, milk producers and wine growers. Some consumers choose not to shop at the supermarket because they believe some of its policies towards suppliers are unfair.

In 2012, the supermarket's defence was that it planned to create 20 000 new jobs which would help the economy. The Prime Minister said 'the supermarket is the biggest private sector employer in the country and its commitment to creating jobs is fantastic news at a difficult time for the economy.' However, a report in January 2012 stated that the supermarket did not pay what was regarded as a living wage to all its employees. This was despite the fact that its chief executive was paid the equivalent of US\$ 10.9 million in 2011.

The company reported that it planned substantial expenditure to improve its existing shops and open new ones. It needed the profits from its monopsony position to fund this new investment. Some consumers said that the expansion would eventually be likely to harm all shoppers, by reducing options and driving other businesses out of the market.

Source: London Evening Standard 2012; Daily Telegraph 2012

- (a) In the article the supermarket states that it helps the economy. Is this usually an aim of large businesses? [5]
- (b) The article says the supermarket 'acts as a monopsonist'. Analyse what this means and consider whether the article can be used as evidence to support the opinion that a monopsony is beneficial. [8]

14. Macroeconomic decisions: microeconomic effects.

In 2011 many countries experienced a recession. Most industries, even monopolies, in those countries saw a decline in demand, consumer spending and profits. However the decline was less severe in some firms, for example those in the food and beverage industry, than for others, for example those in the leisure industry. This fall in consumer spending and in consumer confidence might have been caused by anticipated job losses as governments announced reductions in public sector expenditure.

Governments decided to reduce expenditure because they had very large budget deficits. Apart from public sector employment reductions the macroeconomic measures they introduced included fewer subsidies, tax increases and a more restrictive monetary policy. Tax increases did not help businesses. For example they made it more necessary for firms to make the control of any credit they gave a priority, and to monitor their cash flow very carefully. Increasing prices to match indirect tax increases in order to retain profit levels was not always possible when consumer demand was reduced. The alternative of reducing costs was also a problem. Some argued that firms operating with a high proportion of fixed costs found the market conditions increasingly difficult as their revenues failed to recover and the possibility for further cost reductions became more limited. Others thought that firms with a higher proportion of variable costs faced greater difficulties.

Some governments also reduced investment allowances and subsidies to firms. These tax-free allowances enabled firms to deduct some of the investment cost from what they had to pay in tax. However, a reduction in the allowances had no effect on those industries that did not invest in new equipment. It did harm small and medium-sized enterprises that wanted to buy new machinery, or undertake research in order to become more efficient, or improve their products.

The situation was not helped by increased restrictions imposed by the government on banks' ability to lend. These restrictions meant borrowing for house purchases was more difficult and this again reduced consumer expenditure.

(adapted from The Guardian)

Analyse with the aid of a diagram, showing costs and revenue for a monopoly, what is likely to happen to the firm's profits when there is a fall in demand in the industry due to a recession. [5]

- 15. (a) Distinguish between perfect competition and monopolistic competition. [12]
- (b) Discuss whether oligopoly is likely to be the most realistic market structure in a mixed economy. [13]
- 16. Discuss whether the objectives of a firm in a perfectly competitive market are likely to be different from the objectives of a firm in an imperfect market structure. [13]
- 17. In 2007 the cost of a single ticket on London trains bought at the time of travel was £4. The same ticket bought in advance was £2.50 if used up to 19.00 hrs and £2 after 19.00 hrs. Children could travel free at any time, and those over 60 could travel free after 09.00 hrs.
- (a) Explain what is meant by price discrimination and analyse what evidence there is of price discrimination in the above statement. [12]
- (b) Discuss how the output and pricing policy adopted by a firm might differ depending on the market structure in which it operates. [13]

18. In many cities worldwide, newspaper publishers compete with each other. Some types of newspapers are sold, but publishers also produce others that are distributed free of charge. Many people and companies pay to advertise in the free newspapers.

Discuss how a firm might compete in a market. [13]

- 19. Airbus, a large aircraft manufacturing company, announced in 2007 that its goal was to increase its \$475 million research budget by 25% in order to try to develop a more environmentally friendly aircraft that had lower fuel consumption.
- (a) Explain why Airbus is likely to be in an imperfect rather than a perfect market structure. [10]
- (b) Economics textbooks sometimes criticise firms in imperfect competition as being against the public interest. What does this mean, and how far does the Airbus announcement prove the textbooks wrong? [15]
- 20. Large firms necessarily become monopolistic. Monopolies adopt practices that are undesirable. Therefore, large firms should be regulated by governments. Discuss whether there is any truth in this argument. [25]
- 21. The price of a firm's product is above the average total cost. Discuss whether the firm should stop production if its price falls. [15]

22. The following extract is adapted from an article that appeared in 2003.

Diversification in Botswana

The Botswana government wishes to use the wealth that the country obtains from diamonds to diversify its economy. Botswana is the world's largest producer of diamonds, which accounted for 77% of the country's export earnings and 45% of GDP in 2002.

The diamond industry is controlled by one company, Debswana, which is a partnership between De Beers (a private sector company) and the Botswana government. Each owns 50% of Debswana but De Beers keeps 75% of the profits.

Botswana has various incentives for investors. The corporate tax rate is one of the lowest in Africa at 15% and profits can easily be sent back to the home country because there are no exchange controls. Wage rates are relatively low and the workforce is the most educated in Africa. Botswana is also perfectly located to become a financial hub for the 200 million people in the 14 African countries in the Southern African Development Community.

However, there are problems for investors. Usable water is in short supply and transport costs are high. Labour is also in short supply because the population is only 1.7 million and life expectancy is only 39.

Despite its problems, Botswana remains an example of prosperity in conflict-ridden Africa. US President George W Bush said 'Botswana has demonstrated sure, sound economic administration and a commitment to free market principles.'

What type of market structure exists in the Botswana diamond industry? Use the article to explain your answer. [3]

23. Gillette, the world's largest razor maker, announced in August 2003 that its annual profits had risen by 15%. In the same period, its sales increased by 11% as there was increased demand for its Sensor3 and Mach3Turbo razors and a reduction in the price of Duracell batteries, which Gillette produces. However, Gillette faces strong competition from Energizer Holdings, which sells batteries and

Schick razors. Energizer introduced a new four-blade razor in September 2002 and increased its advertising and product promotion. Gillette lost US market share and announced it planned to increase expenditure on marketing.

Explain how firms are said to behave in oligopolistic markets and discuss how far this is supported by the above statement. [25]

24. Discuss the similarities and differences between a firm's behaviour in perfect competition and oligopoly. [25]

25. Banks have to merge to reap economies of scale.

The Deputy Prime Minister of Singapore said 'To be strong, banks need to be big; to become large enough Singapore banks will have to merge.' He argued that Singapore's banks need to be large to compete with foreign banks, especially as they are a core part of Singapore's economy. 'The industry is characterised by economies of scale. Small banks do not have the resources to compete either in quality of service or in returns to shareholders, and their costs are higher.'

The Deputy Prime Minister pointed out that the largest international bank had an estimated 100 million customers but the largest of Singapore's five banks had just five million customers. Switzerland, which had a GDP and population about twice that of Singapore, had only two big banks after merger. The Netherlands had just three banks, while even Australia had only four.

Even though a merger among Singapore's five banks would still create a small entity by international standards, there would be advantages. However, the Deputy Prime Minister assured Parliament that a merged bank would not be allowed to use its market power to engage in monopolistic or anti-competitive practices. Any such bank 'would still have to provide affordable banking to low-income Singaporeans.'

(a) The banking industry in both the Netherlands and Australia could be described

26. There are often reports in the press that company profits have not risen as much as in previous years. As a result the company receives adverse criticism.

- (a) Explain what a company might do if it wished to try to increase its profits. [13]
- (b) Discuss what alternative objectives a company might have apart from profit maximisation. [12]

27. Competition, monopoly and the market

Firms are sometimes thought of as machines: inputs go in, products come out. However, it matters how powerful these firms are allowed to become.

Competition law – the law that governs how firms compete in the market, how they may exert their power and how and when they may join forces – has not prevented high concentration ratios in many industries.

Global monopolies have been created in the name of 'free market' capitalism. Mergers have been approved and monopolies tolerated under the assumption that they are efficient. Their ability to enable innovation is relied upon to justify these monopolised industries.

Competition law is being used to protect a narrow set of public interests based on the idea of 'consumer welfare'. The test applied by the law is whether any change will result in lower prices for consumers and thus is beneficial. This is regardless of how monopolised the resulting market structure becomes.

The logic that focuses on consumer prices is flawed. This can be seen in the impacts of firms on the environment. Prices do not capture the negative externalities of production, for which neither the producer nor the consumer pays.

Low consumer prices are not an adequate indicator for consumer welfare. The low price/low wage spiral keeps pushing for cheaper goods and services to increase the profitability of the firm.

The result is that workers are paid less. Low prices cause unequal bargaining positions between powerful employers and workers, and between powerful buyers and small independent suppliers.

Regulation has a role to play in protecting consumers from the worst abuses of market power by firms. There needs, however, to be new competition law that promotes the free market rather than the desires of the monopoly firms. It needs to consider the balance of power between the public sector and private enterprise.

Source: RSA Journal. Issue 3, 2020 p 32.

The article refers to concentration ratios. Explain what is meant by a concentration ratio and how it is calculated. [4]

28. Some firms frequently use price discrimination.

Assess the view that when this occurs, price discrimination will always benefit the producer at the expense of the consumer and society. [20]

29. Evaluate the consequences for the price and output of a firm if it changes its objective from profit maximisation to sales maximisation as a response to the principal-agent problem. [20]

30. The model of perfect competition is the ideal form of market structure because it is the most efficient.

With the help of diagrams, evaluate this statement. [20]

31. Evaluate the view that monopolistically competitive firms will always charge lower prices and operate more efficiently than a monopoly firm. [20]

32. The threat from large firms

In 2021, one of the largest United States (US) technology companies averaged sales of US\$1.2 billion a day. It took less than four seconds to earn US\$52000, the average American yearly salary. Three of the largest technology companies reported record breaking sales and profits. Five of the largest companies made combined profits of over US\$68 billion.

They were helped by the Covid-19 pandemic that caused a huge increase in online working and shopping. The ability to work and shop online was greatly welcomed by many who were forced to stay at home.

Critics, however, worry that if this trend to large firms continues the future will be controlled by a handful of super-rich, super-powerful companies. They will dominate economic activity. This is not just bad for the economy; it is bad for consumers and bad for competition. Also, economic concentration causes unacceptable inequality. One powerful firm tried to prevent workers joining a trade union.

Their huge cash reserves mean that they could undercut possible new entrants and prevent competition. Investors will be wary of investing in possible competitors and new owners would be prepared to sell out to the dominant firms rather than try and compete.

The size of the firm gives it political power to fight any official or government intervention. Governments are beginning to be aware of this. The chair of the US body that deals with competition law said there was a range of potential risks created by the large companies. The government is aware of their ability to avoid paying taxes and their ability to dominate allows them to expand into markets for similar products.

Ten years ago, a co-founder of one of the large firms said 'Joseph Schumpeter, the economist who used the term creative destruction would be proud'. But now

that co-founder is not so sure. 'We went from being pirates to being the navy. People may love pirates when they are young and small, but nobody likes a navy that acts like a pirate. Today's technology giants are just like that'.

Source: The Guardian, 31 July 2021

- (a) (i) Distinguish between limit pricing and predatory pricing. [4]
- (ii) Explain whether there is any evidence in the article of these two types of pricing policy. [2]
- (b) Assess three possible positive effects on the macroeconomy of the huge increase in the size of the five largest technology companies. [6]
- (c) The article says the growth of large firms is bad for consumers, bad for competition, and causes inequality.

Consider whether this statement can be supported by the article and by economic theory. [8]

MARK SCHEME

1. Monopoly producers might control all the market supply or sometimes the state might provide a legal definition of a monopoly, for example, a firm which controls at least 25% of the market share. Potential benefits to the monopolist might include: higher profits; increase in efficiency; increase in market share; growth of the firm. The consumer benefits might include: lower prices; higher quality product; greater availability of a product.

Responses might refer to a range of alternative barriers to entry including: economies of scale; branding/advertising; legal requirements/patents; natural monopolies; limit pricing. Good responses will choose at least two types of barrier and discuss how each might have a positive/negative effect on both the producer and the consumer. For example, economies of scale might increase Monopoly profits by lowering unit costs but also benefit the consumer by possible subsequent price reductions. Similarly, the use of limit pricing to prevent new entrants might lower prices for the consumer in the short run but lead to a higher market share and higher profits in the long run.

On a more general note, some barriers might allow a monopolist to maintain profits in the long run and invest in research and development thus achieving dynamic efficiency. These benefits might by be passed on to the consumer through lower prices, higher quality products and more choice.

Alternatively, barriers might lead to complacency and X inefficiency which is likely to lead to higher prices and lower quality products.

L4 (9–13 marks): For a clear, explanation of two barriers to entry and a discussion of how each of the barriers might have both a negative and positive effect on the producer and the consumer. An attempt should be made to summarize the extent to which producers/consumers might achieve a net benefit.

L3 (7–8 marks): For a fair explanation of two barriers which focuses upon either the potential costs/benefits to the producer or consumer only or an explanation which does not attempt to examine both costs and benefits in both cases. A brief conclusion referring to the extent of the costs/benefits might be made.

L2 (5–6 marks): For a more descriptive explanation that indicates knowledge of different types of barrier to entry but does not identify specific costs/benefits and does not distinguish clearly between costs/benefits to the producer and costs/benefits to the consumer.

L1 (1–4 marks): For an answer that has some basic correct facts but includes irrelevancies and errors of theory.

2. (a) The main types of efficiency will be explained including: allocative efficiency, productive efficiency and possibly dynamic efficiency. Reference to the long run position in perfect competition in combination with definitions of efficiency should allow that firms in perfect competition will achieve both allocative and productive efficiency in the long run. Similarly, reference to a long run position in monopolistic competition using the same definitions of efficiency should enable candidates to conclude that a firm in monopolistic competition will not be allocatively efficient i.e. will not produce where AR=MC and it will not produce at the minimum point of its long run average total cost curve. Therefore it will not operate at an optimum level of output.

Answers which point out that the firm in monopolistic competition will be operating at a productively efficient level of output in the long run are acceptable provided it is clear that the definition of productive efficiency is stated as 'the minimum unit cost attainable for a given level of output'. A conclusion would point out that a perfectly competitive firm is therefore likely to be more efficient than it monopolistically competitive counterpart. Good responses might refer to dynamic efficiency and given the small size of firms in both types of market structure, neither firm would be able to benefit from this type of efficiency.

L4 (9–12 marks): For a clear explanation of the concept of normal profit and an analysis of the long run positions of both types of firms, supported by clear, accurately labelled diagrams. A clear understanding allocative and productive efficiency. An attempt to evaluate the accuracy of the claim under consideration by comparing the two long run outcomes. A conclusion which points out that the statement is incorrect.

L3 (7–8 marks): For an accurate reference to the question and clear understanding two types of efficiency and an attempt to link these different types of efficiency to different long run positions of both types of firm but with a more limited evaluation of the differences in efficiency between the two firms in the long run. Analysis of how the long run positions are attained will be also less well developed.

L2 (5–6 marks): For a briefer descriptive comment that examines two types of efficiency and applies these concepts to both types of firm in the long run. Diagrams might not be accurate and it is not clear how the long run position has been attained. Does not use these differences in long run outcomes to discuss the validity of the view under consideration.

L1 (1–4 marks): For an answer that has some basic correct facts but includes irrelevancies and errors of theory.

(b) Answers should explain what economists mean by 'interdependence' in relation to an Oligopoly market structure. Oligopolies will be large firms with a high concentration ratio. This means that the pricing and output decisions of any one of these firms is likely to have a significant impact on profits, market share and growth of their main competitors.

One example might be illustrated by reference to the kinked demand curve and the link between price changes and changes in total revenue. This also emphasises the need to avoid price wars where all firms risk a fall in profits while the consumer benefits.

Game theory, which uses the idea of a maxi-min strategy and refers to the 'Prisoners Dilemma' as an example, can be used by an Oligopoly firm to promote the idea of collusion to choose a price which will maximise revenue. There are alternatives to this approach. For example, the market price may be set by the dominant firm while the remaining firms follow.

Tacit collusion might take place where the market price is set by 'rules of thumb' such as average cost pricing. Thus although Game theory is undoubtedly useful to Oligopoly firms, there are a number of alternative approaches which might also be successfully adopted.

- L4 (9–13 marks): For a response which explains the concept of interdependence in relation to the specific market structure of Oligopoly. The kinked demand curve should be used to illustrate the pricing problem. A clear analysis of the use of Game theory should be used to discuss a potential solution to this problem. At least one alternative pricing approach should be discussed. A conclusion should provide a judgement upon the specific statement under discussion.
- L3 (7–8 marks): For a competent analysis of the importance of interdependence in relation to Oligopoly pricing, which incorporates the theory of the kinked demand curve and identifies why this constitutes a problem. An attempt might be made to explain Game theory but this will not be clearly identified as a solution to the specific problem. There will be no attempt to consider whether Game theory might represent the only solution.
- L2 (5–6 marks): For a brief, descriptive approach which refers to interdependence and the kinked demand curve or interdependence and Game theory but does not attempt to link the three concepts to address the specific question
- L1 (1–4 marks): For an answer that has some basic correct facts but includes irrelevancies and errors of theory.
- **3.** (a) Comment on different types of cost. If the aim is profit maximising, then the significance of marginal cost should be mentioned and the significance of average total cost in the long run and average variable cost in the short run.
- L4 (9–12 marks) For a consideration of profit maximising position and role of ATC in long run and AVC in the short run.
- L3 (7–8 marks) For an answer that concentrates on the profit maximizing position and the role of ATC in the long run. AVC will probably be omitted.
- L2 (5–6 marks) For an answer that concentrates only on the profit maximizing position.
- L1 (1–4 marks) For an answer that has some basic correct facts but includes irrelevancies and errors of theory.

- (b) This requires an explanation of price discrimination and an evaluation of whether it is always possible and whether there might be benefits from price discrimination if it means the firm can continue operating to avoid shutting down.
- L4 (9–13 marks) For clear analysis of possibility/profitability of price discrimination (separate markets, different price elasticities of demand) and potential benefits.
- L3 (7–8 marks) For an analysis of the possibility of price discrimination, probably concentrating on either separate markets or different elasticities and very limited comment on potential benefits.
- L2 (5–6 marks) For an analysis of price discrimination that is incomplete and with no evaluation of its potential benefit to the firm.
- L1 (1–4 marks) For an answer that has some basic correct facts but includes irrelevancies and errors of theory.
- **4.** Candidates should consider each of the assumptions. Is the firm aware of market condition, is its best interest achieved by maximising profits and in which market structure might that be true.
- L4 (18–25 marks): For a sound discussion of under what market structure the firm will be fully aware of market conditions, and whether it is always best to aim to maximise profits. Consideration of contestable markets, alternative aims, price leadership, lack of information, degrees of competition and lack of information. Maximum 21 no conclusion.
- L3 (14–17 marks): For a competent comment but with consideration of only part of the assumptions and a less developed analysis.
- L2 (10–13 marks): For a weak comment on the assumptions and only a brief explanation of alternative aims.
- L1 (1–9 marks): For an answer that shows some knowledge but does not indicate that the question has been fully grasped or where the answer is mostly irrelevant.

- Create barriers to competition by reducing switches in demand,
- Costs of scheme funded by higher prices
- not affordable by smaller firms high initial costs, \$60m for one supermarket,
- Causes confusion of information leading to imperfect knowledge.
- **6.** (a) The owner of the business (principal) is not necessarily taking the decisions about its operation. This is done by managers (the agent). There may be difference between the aims and objectives of the two. Unlikely to occur in perfect competition, firms are too small; or monopolistic competition. Occurs in larger firms, usually with shareholders in oligopoly and monopoly.
- L4 (9–12 marks) For clear explanation of the 'problem' and a comment on why it occurs in some market structures and not others.
- L3 (7–8 marks) For a less developed explanation but with a judgement on where the 'problem' may exist.
- L2 (5–6 marks) For a briefer explanation, or an inaccurate description of market structures, unclear judgement.
- L1 (1–4 marks) For an answer that has some basic correct facts but includes irrelevancies and errors of theory.
- (b) Contestable market is one with zero entry and exit costs. No barriers to entry and no barriers to exit, such as contractual agreements. For a market to be perfectly contestable, industry technology would be readily available to potential entrants. This makes the market potentially competitive and aims other than profit maximising might exist. Discussion of alternative aims; behavioural, managerial, satisficing, limit pricing.
- L4 (9–13 marks) For a clear explanation of contestable market, and aim of perfectly competitive firm with two alternative aims. Good structure to the answer.

- L3 (7–8 marks) For a weaker comment either the explanation of contestable, or the perfectly competitive aim or only one alternative aim.
- L2 (5–6 marks) For a brief undeveloped answer with lack of clarity about contestable and the alternative aim.
- L1 (1–4 marks) For an answer that has some basic correct facts but includes irrelevancies and errors of theory.
- **7.** (a) Explanation of distinction mentioning barriers to entry, ability to control prices, information, whether products are identical, numbers of firms. Diagrams can be in either perfect competition or monopoly relating average revenue to average cost at maximum profit output. Supernormal possible in short run in perfect competition will be competed away in long run by entry of new firms and increase in supply.
- L4 (9–12): for clear distinction between the markets, clear diagram and clear explanation of increased competition and normal profit in the long run through increased supply
- L3 (7–8): for a less developed answer mentioning only some of the different criteria for the markets, or not fully explaining the short and long run position
- L2 (5–6): for a briefer explanation, or an inaccurate diagram, or an omission of the long run position
- L1 (1–4): for an answer that has some basic correct facts but includes irrelevancies and errors of theory
- (b) Discussion of alternative aims; behavioural, managerial, satisficing. These will not occur in perfect competition. Prisoner's dilemma involves cooperation for maximum benefit so requires the ability to trust other participants in decision-making.
- L4 (9–13): for a clear comment on two different aims and a consideration of the second part of the question

L3 (7-8): for a weaker comment on two aims and a briefer comment on the second part of the question

L2 (5–6): for a brief undeveloped answer about the aims and very scant comment on the second part of the question

L1 (1–4): for an answer that has some basic correct facts but includes irrelevancies and errors of theory

8. (a)

- group of companies/countries
- acting together to fix output
- and prices
- selling the same good

Any 3

(b)

- It is not obviously a cartel but there is a market leader (Saudi Arabia)
- over 35% world supply
- output constant
- with evidence from Fig.1

(c)

- comment on Fig.2
- output has increased in 2013/14 (from text)
- on D/S diagram S curve would move out
- price would fall
- information consistent with theory

(d) Winner in the short-run:

• It has reduced the dependence on OPEC's oil supplies – reduces imports – and has begun to export resulting in an improved balance of trade / BOP.

 Increased earnings in the USA leading to increased consumption – multiplier effect – recovery from financial crisis.

(Maximum 4 marks)

Loser in the long-run:

- Cost of fracking may become higher (very expensive equipment) so costs become greater than world oil price hence Saudi Arabia wants to allow the price to fall further.
- Opposition to fracking (negative externalities) environmental lobby tries to curb supplies.
- US\$ may become too strong if its economy strengthens leading to more expensive oil for importing countries and a possible loss of markets to rival suppliers in OPEC and Russia.

(Maximum 4 marks)

- **9.** Candidates are expected to consider the argument. First, what is meant by a perfect market system and whether it is possible. Secondly whether a complex modern economy inevitably leads to a concentration of market power, and thirdly, if this is so, whether it serves the public interest. Candidates may refute, or accept, the subsidiary conclusion about market power, or the final conclusion or both.
- L4 (18–25) For a clear consideration of each stage of the argument in the question. A reasoned conclusion should be presented.
- L3 (14–17) For a competent but more limited comment on the whole argument or by concentrating on part of the argument maybe the link between market power and public interest by discussing market failures.
- L2 (10–13) For an undeveloped discussion of the argument concentrating on only one aspect and with no overall comment on the conclusion in the question.
- L1 (1–9) For an answer which shows some knowledge but does not indicate that the question has been fully grasped, or where the answer contains irrelevancies and errors of theory.

- **10.** Candidates should consider whether perfect competition implies perfect knowledge and profit maximising. They should then consider whether these concepts may be found at all, or only sometimes, in monopoly, and if not, what other aims might exist.
- L4 (9–13) For a sound explanation of the analysis and a clear understanding with a conclusion (no conclusion 9 max).
- L3 (7–8) For a competent comment but with limited development of the analysis and a weaker conclusion (no conclusion 7 max).
- L2 (5–6) For a brief explanation of the concepts and a weak comment on the possibilities available in monopoly and no conclusion.
- L1 (1–4) For an answer which has some basic correct facts but includes irrelevancies. Errors of theory or omissions of analysis will be substantial.
- **11.** Analysis suggests that profits will be high and that price will be above the cost of production. The monopolist can control prices or output, and is free to increase production/investment if it wishes. (2) Coal India controls 80% of production so could be classed as a monopoly. (1)

Price controls have limited prices, profits and hence investment. Coal India cannot determine the price. Competition is from foreign suppliers and Coal India is unable to compete on price. (2)

- **12.** Differentiation is branding of goods, advertising by brand names, to increase consumer loyalty and increase profits. Description of two market structures monopolistic competition, oligopoly and monopoly. (Duopoly is not on the syllabus).
- L4 (9–12) For a reasoned explanation and clearly structured answer which deals with a good explanation of two market structures.

- L3 (7–8) For a good explanation of differentiation but a less developed answer of the market structures; either because both are not well explained or one is well explained but the other quite weak.
- L2 (5–6) For a limited attempt which explains differentiation but does not clearly explain either of the market structures.
- L1 (1–4) For an answer which has some basic correct facts but includes irrelevancies. Errors of theory or omissions of analysis will be substantial.
- **13.** (a) Traditionally, large businesses are thought to want to maximise profits (1). Other alternative aims are recognised, for example: to increase sales, satisficing, managerial or behavioural aims (1). Increasingly, large companies are promoting the idea that they are concerned about the environment and the conservation of resources (1), as well as increased employment (1). Judgement on how these changes might be thought to be an example of helping the economy (1).
- (b) Monopsonist: meaning a dominant buyer in a market. In most supply chain relationships, for example, between supermarkets and their suppliers the long term sustainability of an industry requires that both buyer and supplier benefit if there are no mutually beneficial gains from trade, ultimately trade and exchange will break down. The growth of the Fair Trade label and its organisation is evidence of how pressure from consumers can lead to improved contracts and prices for farmers in developing countries (2).

Can the article be used to support the view that it is a benefit? For suppliers; sometimes yes, as revenue can go up with large orders, but these may be withdrawn. So for suppliers it is not always a benefit (2).

For the supermarket; yes – it allows for lower input costs which may result in higher profits, which can in turn be used to fund capital investment and research (2).

For consumers; maybe because of lower prices but article says overall no benefit (2).

- **14.** Average revenue (ar) shifts back, marginal revenue (mr) shifts back, output declines to a new marginal cost (mc)/mr point, price falls. It is likely that profits will fall, although this might be a reduction in supernormal profit rather than a loss. Diagram: 1 for labels, 1 for shift of one curve (normally the ar one), 1 for correct change in output. 2 for explanation.
- **15.** (a) Explanation in terms of criteria for perfect competition and the similarities/differences that occur in monopolistic competition. Candidates should also comment on the likely aims of the two structures profits, output, prices.
- L4 For an explanation of both market structures criteria, aims, likely profits with a conclusion. 9–12
- L3 For a competent explanation which does not fully analyse both types of of market structure. There will be some comment but the analysis will not be fully developed or extensive. 7–8
- L2 For an accurate though undeveloped explanation concentrating possibly on either the criteria or the aims probably presented as two separate parts of the answer with no direct distinction drawn. 5–6
- L1 For an answer which shows some knowledge but does not indicate that the question has been fully grasped. The answer will have some correct facts but include irrelevancies. Errors of theory or omissions of analysis will be substantial. 1–4
- (b) Discussion of the characteristics of oligopoly relating them to a mixed economy where profit motive, brand loyalty, larger firms, non-price promotions, barriers to entry, collusion are likely to be found. Candidates should discuss whether these characteristics are found in other market structures and which structure is the more likely.
- L4 For a good discussion of market structures and their relevance to reality. A conclusion should be drawn. 9–13

- L3 For a competent explanation of the characteristics but with an undeveloped comment on the likelihood of finding oligopoly rather than other market structures. 7–8
- L2 For a limited explanation and only a brief comparison and comment on the significance of oligopoly with no conclusion 5–6
- L1 For an answer which has some basic correct facts but includes irrelevancies. There will be errors of theory or omissions of analysis. 1–4
- **16.** Discussion of the aims which are assumed for perfect competition, profit maximisation, and the aims which are possible for imperfect competition. One of these is profit maximization but there are also other behavioural and managerial aims.
- L4 For a good discussion and comparison of the aims between the different market structures with a range of aims in imperfect markets. (9–13)
- L3 For a competent explanation with either an undeveloped comment on a range of aims in imperfect markets or a fuller explanation of two aims. (7–8)
- L2 For a limited discussion and only a brief comparison. (5-6)
- L1 For an answer which has some basic correct facts but includes irrelevancies. There will be errors of theory or omissions of analysis. (1–4)
- **17.** (a) Explanation of price discrimination requiring separate markets for the same product and different elasticities for it to be profitable. Difference in the time of day. Could be argued to be a separate product. Different fares for different people who may have different elasticities of demand on the same service does separate the market for the same product. Those who cannot buy fares in advance also face price discrimination.

- L4 For a clear explanation of price discrimination with mention of both separate markets and different elasticities. Good discussion and application to the examples given. [9–12]
- L3 For a more limited explanation of price discrimination, possibly not mentioning elasticity and a more limited consideration of the examples given. [7–8]
- L2 For a very general comment on price discrimination with limited analysis and only brief comment on the examples given. [5–6]
- L1 For an answer which has some basic correct facts but includes irrelevancies. There will be errors of theory or omissions of analysis. [1–4]
- (b) Discussion of output and pricing policy in different market structures. Market price and output in perfect competition against attempts to control the price and output in imperfect competition. Candidates could mention maximum profits, price leadership, collusion, interdependence and oligopoly, non-price competition, establishing barriers to entry.
- L4 For a reasoned and full discussion and clearly structured answer on which covers three market structures, probably perfect competition, monopoly and one other. [9–13]
- L3 For a competent but less developed discussion of three market structures or a fuller discussion of two market structures. [7–8]
- L2 For a limited but attempt at two market structures or a full account or one market structure. [5–6]
- L1 For an answer which has some basic correct facts but includes irrelevancies. Errors of theory or omissions of analysis will be substantial. [1–4]
- **18.** Candidates could discuss price and non-price competition. They could also mention collusion and price discrimination.
- L4) For a sound discussion with good explanation of the both price and non-price competition. (9–13)

- L3) For a competent comment but with limited attempt probably at non-price competition and little mention of price discrimination or collusion. (7–8)
- L2) For a correct explanation maybe concentrating on short run or long run pricing and little or no attempt at non-price competition. (5–6)
- L1) For an answer which has some basic correct facts but includes irrelevancies. Errors of theory or omissions of analysis will be substantial. (1–4)
- **19.** (a) Explanation of criteria for perfect competition and a comparison of those criteria with this company which is a large aircraft company with huge research expenditure, large capital investment and limited competitors.
- L4) For a sound explanation of the criteria with clear understanding of the principles involved and a link to the company mentioned. (8–10)
- L3) For a competent explanation but with limited consideration of each of the criteria. (6–7)
- L2) For a general explanation which does not draw a conclusion. (4–5)
- L1) For an answer which has some basic correct facts but includes irrelevancies. Errors of theory or omissions of analysis will be substantial. (1–3)
- (b) Candidates should discuss the meaning of 'against the public interest'. They should then relate this to the information. There is some attempt by the company to recognise the damage it causes to the environment but there is no suggestion that it would not seek to maximise profits or market its product to serve its own aims.
- L4) For a reasoned discussion and clearly structured answer with conclusion on the meaning and application of the public interest. (12–15)
- L3) For a full discussion of the public interest but with only a limited attempt at an application to the company and an undeveloped conclusion. (9–11)

- L2) For a limited but acceptable attempt which may not fully consider public interest in terms of profit, output, variety of products and which does not have a conclusion. (6–8)
- L1) For an answer which has some basic correct facts but includes irrelevancies. Errors of theory or omissions of analysis will be substantial. (1–5)
- **20.** Candidates should develop the argument. They need to debate whether large firms are necessarily monopolistic or whether a market can be competitive even though it has large firms. They then need to debate, even if there is a tendency for large firms to become monopolistic, whether monopolistic practices are always detrimental. Finally they need to form a conclusion.
- L4) For an explanation of the terms in the statement, a clear discussion of the analysis of the different aspects of the theory and a clear discussion of the issues involved, with a reasoned conclusion. (18–25)
- L3) For a competent explanation which does not fully analyse the terms or deal with all the issues. There will be some discussion but the evaluation will not be fully developed or extensive. (14–17)
- L2) For an accurate though undeveloped explanation of part of the statement but with weak attempt to discuss and consider it as an argument and limited evaluation and no real conclusion. (10–13)
- L1) For an answer which shows some knowledge but does not indicate that the question has been fully grasped. The answer will have some correct facts but include irrelevancies. Errors of theory or omissions of analysis will be substantial. (1–9)

- **21.** Discussion of the theory of determination of output in a profit maximising firm. Assumption of profit maximisation needs to be stated for the first part of the analysis. In perfect competition the firm will cease production if the average revenue falls below the average variable cost in the short run. It will cease production in the long run if average revenue stays below average total cost. In imperfect competition the same reasoning applies but the long-run may be over a longer period and the firm may have other aims than profit maximisation.
- L4) For a sound discussion with good explanation of the analysis and a clear understanding of the principles involved. Reasoned comments should be given.

[12 - 15]

L3) For a competent comment but with only more simplistic perfect competition case.

[9 -11]

L2) For a correct, but non-developed discussion of the analysis.

[6 - 8]

L1) For an answer which has some basic correct facts but includes irrelevancies. Errors of theory or omissions of analysis will be substantial.

[1-5]

22. Imperfect, monopoly. Evidence: one major company, partly owned by govt. (implication is that govt. sees need to control/own because of monopoly situation), possible barrier to entry. Monopoly position enables high profits, (75% to private sector comp, and total earnings are high) and possible exploitation of labour through low wages.

- **23.** Candidates should first explain the traditional theory of behaviour in oligopoly markets and then refer to the statement.
- (i) Theory assumes profit maximisation as aim. Gillette is concerned with profits, and has increased sales and revenue. Nothing is said about whether prices were kept the same as revenue increased.
- (ii) Theory assumes product differentiation. The article states that products are differentiated by brand names. There can be product innovation.
- (iii) The theory assumes that firms will keep the prices relatively constant because they fear changes in competitor behaviour. The article says a competitor increased its advertising. Gillette reacted as it is concerned about market share. It also increased its advertising. It is likely that the price will not remain the same as advertising increases unless sales can increase to meet the cost but nothing is said about this.
- (iv) Theory assumes potential competition. There may be restrictions due to barriers of entry. The article says there is direct competition.
- (v) Theory assumes product differentiation and allows for advertising for maximum profits. The article mentions advertising. Policies to increase advertising expenditure fit with the analysis.
- (vi) The kinked demand curve theory does not emphasise an increase in market share as a policy. The article says Gillette is keen to increase market share. Policies to increase market share do not necessarily fit with the traditional theory.

	explanation of oligopolistic markets	how far supported by statement
L4	For a reasoned and clear explanation	Good links to the statement
	with accurate development five	together with reasoned
	points of theory 9 – 13.	conclusion 9 – 12
L3	For a clear explanation of four of the	Imprecise links to the statement
	points together with limited	There will be some discussion
	elaboration of the analysis. 7-8	but the evaluation will not be
		fully developed or extensive 7 – 8
L2	For a correct explanation of three of	Weak or ill-explained links to the
	the points of theory 5–6.	statement. The explanation will
		be an undeveloped explanation

	with some attempt at analysis		
	but only limited evaluation 5 – 6		
L1	For an answer which explains up to three of the points of the theory and		
	shows some knowledge but does not indicate that the question has been		
	fully grasped. The answer will have some correct facts but include		
	irrelevancies. Errors of theory or omissions of analysis will be substantial		
	1-9		

- **24.** Similarities: possible aims of profit maximisation, calculation of costs, recognise changes in costs, interested in calculating possible revenue. Differences: In oligopoly discussion of recognition of the fact that firms can manipulate prices, can practise price discrimination, but need not change prices with every change in market demand, (kinked demand curve), do have differentiated products, do recognise the inter-relations between the products of one firm and the actions of another, may or may not learn from results of changes in price and influence on demand. Collusion.
- L4) For a thorough explanation of the theory, a clear analysis, with a discussion.

18 - 25

L3) For a competent explanation which does not fully analyse the theory but makes some attempt at evaluation.

14 - 17

L2) For an accurate though undeveloped explanation with some attempt at analysis but only limited evaluation.

10 - 13

L1) For an answer which shows some knowledge but does not indicate that the question has been fully grasped, or where the answer contains irrelevancies and errors of theory.

- 25. (a) Number of banks, size of banks,
- (b) Comment on price fixing, price rigidity, brand loyalty, product differentiation.
- **26.** (a) Explanation of the link between profits, revenues and costs. Comment on possibilities of increasing revenue or reducing costs. Role of fixed and variable costs.
- L4 For a sound explanation with clear understanding of the principles involved (9-13)
- L3 For an accurate reference to the question but with a more limited explanation (7-8)
- L2 For an explanation which contains minor errors or an undeveloped comment, not necessarily logically presented (5-6)
- L1 For an answer which has some basic correct facts but includes irrelevancies and errors of theory (1-4)
- (b) Discussion of the alternative objectives, influence in the market, behavioural theories, managerial theories, balancing of aims of different parts of the company, pricing according to other firms in the market rather than according to profit maximisation.
- L4 For a reasoned and clear discussion, logically presented (9-12)
- L3 For a fair but undeveloped discussion but with accurate reference to the question (7-8)
- L2 For a limited discussion with little comment on alternative aims (5-6)

L1 For an answer which has some basic correct facts but includes irrelevancies and errors of theory (1-4)

27. The concentration ratio is the sum of the market share percentage held by the largest specified number of firms in an industry. It ranges from 0% to 100%, and an indicates the degree of competition in the industry. Low concentration ratio in an industry would indicate greater competition among the firms in that industry. (2)

It is calculated by adding together the total sales for each of the specified number of largest firms in the industry. (E.g. a 4 firm concentration ration takes the sales of the largest 4 firms) That sum is then divided by the total sales of the industry and converted to a percentage. (2)

28. AO1 and AO2 out of 14 marks. AO3 out of 6 marks.

Indicative content

Responses may include:

AO1 Knowledge and understanding and AO2 Analysis

- The key characteristics for effective price discrimination (PD) to take place. (Ability to set price, separable markets with different price elasticities of demand)
- The use of practical examples to illustrate the meaning of PD.
- An explanation / analysis of at least one model of PD to show the effects on the producer in terms of price, output and profit.
- An explanation / analysis of PD on the consumer in terms of price and quantity demanded.
- The use of relevant labelled diagrams (not mandatory)

AO3 Evaluation

If firms are rational profit – maximisers, the firms must benefit from their action therefore the initial point that the producer will always benefit is true.

As total spending on the good / service takes place this represents a transfer of consumer surplus to the producers.

But it depends on whether the firms gain at the expense of consumer and society.

If the price discrimination exists between domestic and foreign markets The producer may also be able to drive competition from the foreign market if it charges high domestic prices / recovers overheads domestically. This may improve a country's balance of payments.

Some consumers gain and some lose. The lower price in the low PED market will benefit those consumers in that market whilst the opposite occurs in the High PED market.

The increase in profits may allow the producer to increase its research and development leading to innovative production techniques which lower long term costs – dynamic efficiency. The benefits of the dynamic efficiency may be enjoyed by consumers / society as lower prices.

The assessment of the statement should conclude with the view that it should benefit the producer as a matter of rationality but whether this is always at the expense of consumers / society is debateable.

Accept all valid responses.

AO1 Knowledge and understanding and AO2 Analysis 14

AO3 Evaluation 6

29. AO1 and AO2 out of 14 marks. AO3 out of 6 marks.

Indicative content

AO1 Knowledge and understanding and AO2 Analysis

- Definition/explanation of profit and sales maximisation (SM).
- Explanation of the meaning of principal-agent problem.
- Analysis of the profit maximisation in terms of MR = MC and the equilibrium price and output of the firm.
- Analysis of the SM in terms of AR = AC and the equilibrium price and output of the firm.
- Comparison of the price and output decisions of the alternative objectives.
- Relevant diagrams may be used.

AO3 Evaluation

- Profit maximisation results in a higher price and lower quantity than SM.
- Welfare benefits to consumer, as producer surplus is transferred to consumer.
- Greater equality.
- Misdirection of resources to SM firms therefore reduction in allocative efficiency.

Accept all valid responses.

30. AO1 and AO2 out of 14 marks. AO3 out of 6 marks.

Indicative content

Responses may include:

AO1 Knowledge and understanding and AO2 Analysis

- Definitions of productive and allocative efficiency with diagrams.
- Reference to the short run and long run
- Definition of perfect competition, explanation of the assumptions of the perfectly competitive market in terms of number of participants, freedom of entry and exit.
- An analysis of how the assumptions lead to the equilibrium position in perfect competition and the implications of this in terms of productive and allocative efficiency.
- Diagrams to show short run profits, long run profits and resolution to normal profits.

AO3 Evaluation

- Evaluation may be concerned with the realism of perfect competition as a model of economic behaviour or its ability to achieve economic efficiency.
- A demonstration of the model of perfect competition to set a standard of equilibrium at which both productive and allocative efficiency occur.
- A comparison of other market competitive structures outcome(s) with the efficiency suggested by perfect competition.
- Relevance to real world activity and the paucity of real-world examples of perfect competition.
- The impact of monopoly profits on the ability to spend on research and development (R&D), and the implications for dynamic efficiency.

Accept all valid responses

31. AO1 and AO2 out of 14 marks. AO3 out of 6 marks.

Indicative content

Responses may include:

AO1 Knowledge and understanding and AO2 Analysis

- Characteristics of a monopolistically competitive market should be described.
- Difference between short run and long run profit maximizing output in monopolistically competitive markets.
- A monopoly market should be described, including main characteristics and key difference between this type of market and monopolistic competition i.e. barriers to entry.
- Different types of efficiency should be identified and explained.
- Analysis should discuss the links between monopoly and higher prices and inefficiency. This analysis can then be used to compare both monopoly and monopolistically competitive markets.
- Analysis should then be used to compare short run and long run outcomes on both types of market.

AO3 Evaluation

- Some monopolies might invest in new technology and achieve dynamic efficiency. This will enable lower average total costs and an opportunity to pass the benefits of lower costs on in the form of lower prices.
- Similarly, monopolies might benefit from economies of scale which might also lead to lower prices.

- Monopolistically competitive firms might incur additional costs through the need to engage in non-price competition. This might lead to higher prices.
- Monopolistically competitive firms will achieve productive efficiency in the long run but a profit maximizing firm will not operate at an allocatively efficient level of output.
- A conclusion should attempt to address each element of the statement by addressing both price levels and efficiency outcomes in relation to both types of market structure. The key word 'always' should be considered in the light of the preceding argument.

Accept all valid responses

AO1 Knowledge and understanding and AO2 Analysis 14

AO3 Evaluationn 6

32. (a) i. Limit Pricing is a strategy used by the existing supplier to restrict the entry of new entrants into the market. The existing firm sets a price low enough to prevent new entrants considering it a worthwhile market in which to try and compete. They set a price possibly close to average cost so that just normal profit is made. (2)

Predatory pricing by contrast is a strategy which is used by one supplier to force another supplier already in the market to leave the market. They set a price below unit cost in the short run to drive out competition. Then later raise prices to recover those losses. It is considered anti-competitive and is illegal under their anti-trust laws. (2)

1 mark for explanation and 1 mark for development for each concept

ii. Limit pricing: yes, investors not prepared to invest in new companies. Potential owners prepared to sell to existing large firms. (1)

Also new owners might choose to leave the industry and this might be described as Predatory pricing. (1)

Must explain both types from the article to gain 2 marks

- (b) Increase in employment
- increase in aggregate demand
- increase in economic growth
- possible increase in economic development
- multiplier effects.

Any three with a development for each one, 2 marks each.

Also marks might be gained for relevant comments relating to inflation and the balance of payments.

N.B: Must assess effects on macro economy not micro economy

(c) **In support:** Article mentions profit compared with salaries, restriction on union membership, avoidance of tax, expansion into adjacent markets.

Theory: Growth of firms can lead to less choice, higher prices, restricted output, higher profits. This is supported by the article and by theory. It can be detrimental for consumers and detrimental for competition. Monopolies can be formed, small firms forced out of the market. (4 marks for support)

Against the statement: Article mentions consumers working/staying at home and welcoming the service the firms provide.

Theory: Large firms can also have economies of scale, can reduce prices, can encourage innovation and research. This is not mentioned in the article but is supported by economic theory. (4 marks for against the statement)

Conclusion: statement is not therefore always true. (1 mark)

8 marks maximum