Rewarding Learning

ADVANCED
General Certificate of Education
2012

Economics

Assessment Unit A2 1

assessing

Business Economics

[AE211]

FRIDAY 18 MAY, AFTERNOON

MARK SCHEME

General Marking Instructions

This mark scheme is intended to ensure that the A2 examinations are marked consis fairly. The mark schemes provide examiners with an indication of the nature and range o candidate responses likely to be worthy of credit. It also sets out the criteria which they sho apply in allocating marks to candidates' responses. The mark scheme should be read in conjunction with these general marking instructions which apply to all papers.

Quality of candidates' responses
In marking the examination paper, examiners will be looking for a quality of response reflecting the level of maturity which may reasonably be expected of 18-year-olds, which is the age at which the majority of candidates sit their A2 examinations.

Flexibility in marking
The mark scheme is not intended to be totally prescriptive. For many questions, there may be a number of equally legitimate responses and different methods by which the candidates may achieve good marks. No mark scheme can cover all the answers which candidates may produce. In the event of unanticipated answers, examiners are expected to use their professional judgement to assess the validity of answers. If an answer is particularly problematic, then examiners should seek the guidance of the Supervising Examiner for the paper concerned.

Positive marking
Examiners are encouraged to be positive in their marking, giving appropriate credit for valid responses rather than penalising candidates for errors or omissions. Examiners should make use of the whole of the available mark range for any particular question and be prepared to award full marks for a response which is as good as might reasonably be expected for 18-year-old candidates. Conversely, marks should only be awarded for valid responses and not given for an attempt which is completely incorrect and inappropriate.

Types of mark schemes
Mark schemes for questions which require candidates to respond in extended written form are marked on the basis of levels of response which take account of the quality of written communication. These questions are indicated on the cover of the examination paper. Other questions which require only short answers are marked on a point for point basis with marks awarded for each valid piece of information provided.

Levels of response
Questions requiring candidates to respond in extended writing are marked in terms of levels of response. In deciding which level of response to award, examiners should look for the "best fit" bearing in mind that weakness in one area may be compensated for by strength in another. In deciding which mark within a particular level to award to any response, examiners are expected to use their professional judgement. The following guidance is provided to assist examiners.

> **Threshold performance:** Response which just merits inclusion in the level and should be awarded a mark at or near the bottom of the range.
>
> **Intermediate performance:** Response which clearly merits inclusion in the level and should be awarded a mark at or near the middle of the range.
>
> **High performance:** Response which fully satisfies the level description and should be awarded a mark at or near the top of the range.

Marking calculations
In marking answers involving calculations, examiners should apply the “own figure … at candidates are not penalised more than once for a computational error.

Quality of written communication
Quality of written communication is taken into account in assessing candidates’ responses to questions that require them to respond in extended written form. These questions are marked on the basis of levels of response. The description for each level of response includes reference to the quality of written communication. Where the quality of candidates’ economics is not matched by the quality of written communication, marks awarded will not exceed the maximum for Level 2 in questions which have three levels of response or the maximum for Level 3 in those which have four levels of response.

For conciseness, quality of written communication is distinguished within levels of response as follows:

Level 1: Quality of written communication is limited.
Level 2: Quality of written communication is satisfactory.
Level 3: Quality of written communication is of a high standard.
Level 4: Quality of written communication is excellent.

In interpreting these level descriptions, examiners should refer to the more detailed guidance provided below:

Level 1 (Limited): The candidate makes only a limited attempt to select and use an appropriate form and style of writing. The organisation of material may lack clarity and coherence. There is little use of specialist vocabulary. Presentation, spelling, punctuation and grammar may be such that intended meaning is not clear.

Level 2 (Satisfactory): The candidate makes a reasonable attempt to select and use an appropriate form and style of writing, supported with appropriate use of diagrams as required. Relevant material is organised with some clarity and coherence. There is some use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are sufficiently competent to make meaning evident.

Level 3 (High Standard): The candidate successfully reflects and uses an appropriate form and style of writing, supported with the effective use of diagrams where appropriate. Relevant material is organised with a high degree of clarity and coherence. There is widespread use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are of a sufficiently high standard to make meaning clear.

Level 4 (Excellent): The candidate successfully reflects and uses the most appropriate form and style of writing, supported with precise and accurate use of diagrams where appropriate. Relevant material is extremely well organised with the highest degree of clarity and coherence. There is extensive and accurate use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are of the highest standard and ensure that meaning is absolutely clear.

1 **(a)** A hostile takeover bid occurs whenever one company attempts to take over another without the approval of the target company's board of directors. In June 2010 BP's shares were trading at a 10 year low making the company an attractive proposition for potential bidders such as ExxonMobil looking to take advantage of the low share price.

[2] for explanation of a hostile takeover
[4] for explaining how the low share price makes BP an attractive proposition for potential bidders
Constrained maximum of [5] [5]

(b) The social cost of an economic activity is equal to the sum of all the private costs plus all external costs. The private costs of oil extraction include the cost of drilling and refining the oil and labour costs. The external costs include the cost to society of the visual and noise pollution associated with drilling for oil and the cost to the environment and local economy of any oil spills.

While it is relatively easy to calculate the private costs it is much more difficult to calculate the external costs. For example, how do we put a value on noise pollution or on the death of wildlife or the destruction of natural habitat? Calculating the external cost to the local economy is also fraught with difficulty. For example, when trying to calculate the impact of the oil spill on local fishermen, estimates need to be made of how much fish each fisherman is likely to have caught in the period the waters were closed and the likely market price of these fish at that time. When calculating the impact on the local tourist industry estimates need to be made of the likely number and spending patterns of lost tourists. The difficulty in estimating these external costs is illustrated in the text with BP setting aside $20 billion to deal with compensation claims yet some analysts claiming the bill would be closer to $70 billion.

Issues for analysis and discussion include:
- definition or explanation of social costs
- definition or explanation of external costs
- discussion of the difficulty in placing a monetary value on non traded entities such as wildlife and natural habitats
- difficulty in estimating lost trade as a result of an oil spill
- reference to different estimates of external cost $20 billion – $70 billion
- appropriate examples
- appropriate diagrams.

Level 1 ([1]–[3])
- candidate shows little understanding of the term social cost or why it is difficult for economists to accurately calculate the social cost of economic activity
- there is no significant analysis or application
- quality of written communication is limited.

Level 2 ([4]–[7])
- candidate provides some understanding of the term social cost and why it is difficult for economists to accurately calculate the social cost of economic activity
- there is a degree of analysis and application
- quality of written communication is satisfactory.

Level 3 ([8]–[10])
- candidate provides a clear and comprehensive understanding of the term social cost and why it is difficult for economists to accurately calculate the social cost of economic activity
- there is significant analysis and application
- quality of written communication is of a high standard. [10]

(c) There are a number of reasons why a company such as BP would want to invest in alternative energy. These include:
- to diversify its product range and therefore spread the risk of sudden changes in demand or supply conditions
- to future-proof the business and prepare for a time when supplies of oil or gas run out
- to take advantage of government subsidies. The availability of government funding creates an added incentive to invest in alternative energy
- to improve the image of the firm in the minds of environmentally conscious customers. This process is often referred to as green washing
- to enter a market which has the potential to grow and be profitable.
- a genuine desire on behalf of the firm's directors to reduce CO_2 emissions and counteract global warming
- a genuine concern to improve the UK's energy security.

Level 1 ([1]–[3])
- candidate shows little understanding of the reasons why a company such as BP would invest in alternative energy
- there is no significant analysis, application or evaluation of the issues
- quality of written communication is limited.

Level 2 ([4]–[7])
- candidate provides some understanding of the reasons why a company such as BP would invest in alternative energy
- there is a degree of analysis and application
- quality of written communication is satisfactory.

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Level 3 ([8]–[10])
- candidate provides a clear and comprehensive understanding of the reasons why a company such as BP would invest in alternative energy
- there is significant analysis and application with some degree of evaluation
- quality of written communication is of a high standard. [10]

(d) There are a range of policies that governments can use to encourage the oil industry to reduce pollution. One such policy is to provide subsidies to oil companies to encourage them to invest in alternative energy. Source 4 states that the UK government has pledged £2 billion of taxpayer's money to support green investment. Those who support these government subsidies argue that they create an incentive for firms to invest in green technology by making the investment cheaper than would otherwise have been the case. However, those who are opposed to subsidies argue that they are an inefficient way of encouraging green investment since much of the money gets tied up in red tape and that government bodies have a poor record when it comes to making investments on behalf of the public. They argue that taxation, regulation, the extension of property rights or the use of pollution permits are much more effective in encouraging oil firms to reduce pollution.

Areas for analysis and discussion include:
- role of subsidies in encouraging green investment
- administration costs associated with allocating subsidies
- questionable ability of government bodies to pick potential winners
- opportunity cost of subsidy
- use of taxation to reduce pollution
- use and effectiveness of legislation
- cost of enforcement
- impact on price
- reference to government failure
- impact on efficiency
- appropriate diagrams
- appropriate examples.

Level 1 ([1]–[5])
- candidate displays little understanding of the effectiveness of government policy in encouraging the oil industry to reduce pollution
- there is no significant evaluation of the issues
- quality of written communication is limited.

Level 2 ([6]–[10])
- candidate provides some understanding of effectiveness of government policy in encouraging the oil industry to reduce pollution
- there is a degree of evaluation though this may lack depth or be one-sided
- quality of written communication is satisfactory.

Level 3 ([11]–[15])
- candidate provides a clear and comprehensive understanding of the effectiveness of government policy in encouraging the oil industry to reduce pollution
- there is significant evaluation and judgement
- quality of written communication is of a high standard. [15] 40

2 Top economist defends oligopoly

(a) In this section candidates should compare the structural features of oligopoly and monopoly. Strictly speaking a monopoly is a single seller of a good or service with no close substitute. However, the Competition Commission defines a monopoly as any firm with more than 25% market share. An example of a pure monopoly would be NI Railways who have a monopoly in the provision of rail services in NI.

Oligopoly on the other hand occurs whenever a few large firms dominate an industry. The Competition Commission defines an oligopolistic industry as the market structure in which the top four firms have more than 60% of the market. The NI Banking market could be described as oligopolistic as the top four firms have over 80% market share.

Both monopoly and oligopoly market structures can only exist when there are significant barriers to entry.

Areas for analysis and discussion include:
- definition of monopoly
- definition of oligopoly
- structural features of monopoly
- structural features of oligopoly
- appropriate diagrams
- appropriate examples.

Level 1 ([1]–[5])
- candidate shows little understanding of the structural differences between monopoly and oligopoly
- quality of written communication is limited.

Level 2 ([6]–[10])
- candidate shows some understanding of the structural differences between monopoly and oligopoly though this may be incomplete or contain errors
- quality of written communication is satisfactory.

Level 3 ([11]–[15])
- candidate shows a clear and comprehensive understanding of the structural differences between monopoly and oligopoly
- quality of written communication is of a high standard. [15]

(b) Candidates should evaluate conduct and performance in oligopoly with that in other market structures. Traditional economic theory suggests that oligopolies are likely to act against the public interest by charging higher prices than would be the case under more competitive conditions. Being able to charge these higher prices allows the firm to earn supernormal profits. As a result oligopolistic firms are likely to be both allocatively and productively inefficient.

However, those in favour of oligopolies argue that they drive innovation. They argue that oligopolistic firm will use some of their supernormal profits to fund research and product development and as a result will create dynamic efficiency. They also argue that an economy will benefit from permitting oligopolistic firms to develop as it allows firms to become large enough to gain the economies of scale necessary to survive in a global marketplace.

Areas for analysis and discussion include:
- impact of oligopoly on prices
- impact of oligopoly on consumer and producer surplus
- reference to economies of scale
- reference to industries which are natural oligopolies
- reference to supernormal profits
- reference to research and development and product innovation
- reference to dynamic efficiency
- reference to importance of oligopolies in job creation
- reference to costs and benefits of non price competition
- reference to costs and benefits of relative price stability
- comparison with other market structures
- appropriate diagrams
- appropriate examples.

Level 1 ([1]–[7])
- candidate shows little understanding of the view that oligopoly is the most desirable market structure
- there is no significant analysis or evaluation
- quality of written communication is limited.

Level 2 ([8]–[13])
- candidate shows some understanding of the view that oligopoly is the most desirable market structure
- there is some attempt at analysis and evaluation
- quality of written communication is satisfactory.

Level 3 ([14]–[19])
- candidate shows in-depth understanding of the view that oligopoly is the most desirable market structure
- there is significant analysis and evaluation of the arguments
- quality of written communication is of a high standard.

Level 4 ([20]–[25])
- candidate shows clear and comprehensive understanding of the view that oligopoly is the most desirable market structure
- there is a thorough analysis and evaluation of the arguments
- quality of written communication is excellent. [25] 40

3 MPs angry at huge profits earned by UK banks

(a) Supernormal profits are defined by economists as any profit, over and above the minimum required to keep the factors of production in their current use.

Supernormal profits are profits which exceed what an entrepreneur would normally be expected to earn through the employment of a similar combination of factors of production.

Firms earn supernormal profits whenever the average revenue received for selling goods is greater than the average cost associated with their production.

To determine whether a firm is earning supernormal profits an economist could compare the firm's profits with those of other firms in the industry, with those of firms in the same industry in other countries or with those of similar sized firms in other industries.

Areas for analysis and development include:
- definition of supernormal profits
- explanation of how profits are measured
- reference to comparing firms profits with that of other firms
- reference to accounting formula such as ROCE or Net Profit Ratio
- use of appropriate diagrams
- numerical examples.

Level 1 ([1]–[5])
- candidate shows little understanding of how an economist would determine whether a firm was earning supernormal profits
- quality of written communication is limited.

Level 2 ([6]–[10])
- candidate shows some understanding of how an economist would determine whether a firm was earning supernormal profits
- quality of written communication is satisfactory.

Level 3 ([11]–[15])
- candidate shows a clear and comprehensive understanding of how an economist would determine whether a firm was earning supernormal profits
- quality of written communication is of a high standard. [15]

(b) The argument in favour of government intervention to deal with the huge profits of UK banks is based on the view that banks are making huge profits as a result of a lack of competition in the market and not as a result of any business strategy. The huge profits announced by banks (at a time when households are still feeling the effects of the economic downturn) have led to calls for the introduction of greater controls on the operation of banks. Many people blame the banks for the economic difficulties the UK is facing and believe that they should be forced to repay the government for bailing them out in 2008.

There are a range of alternative measures available to government to deal with the huge profits earned by UK banks. These include:
- the use of regulation and price controls – government are considering legislation that would force banks to increase lending
- the use of taxation – windfall taxes
- breaking the banks up into retail and investment divisions
- removing barriers to entry to make the market more competitive or contestable
- nationalisation.

Clearly each of these policies has their advantages and disadvantages.

Areas for analysis and discussion include:
- the efficiency of government regulation
- impact of intervention on the price and availability of loans
- the difficulty in setting an appropriate price (RPI-X formula)
- discussion of regulatory capture
- evaluation based on contestable markets
- the costs and efficiency of nationalisation
- the opportunity cost of using subsidies
- welfare implications of taxation
- appropriate examples
- appropriate diagrams
- reference to UK competition policy.

Level 1 ([1]–[7])
- candidate shows little understanding of the how government should respond to the huge profits earned by banks
- there is no significant analysis or evaluation
- quality of written communication is limited.

Level 2 ([8]–[13])
- candidate shows some understanding of how government should respond to the huge profits earned by banks
- there is some attempt at analysis and evaluation
- quality of written communication is satisfactory.

Level 3 ([14]–[19])
- candidate shows in-depth understanding of how government should respond to the huge profits earned by banks
- there is significant analysis and evaluation of the arguments
- quality of written communication is of a high standard.

Level 4 ([20]–[25])
- candidate shows clear and comprehensive understanding of how government should respond to the huge profits earned by banks.
- there is a thorough analysis and evaluation of the arguments
- quality of written communication is excellent. [25] 40

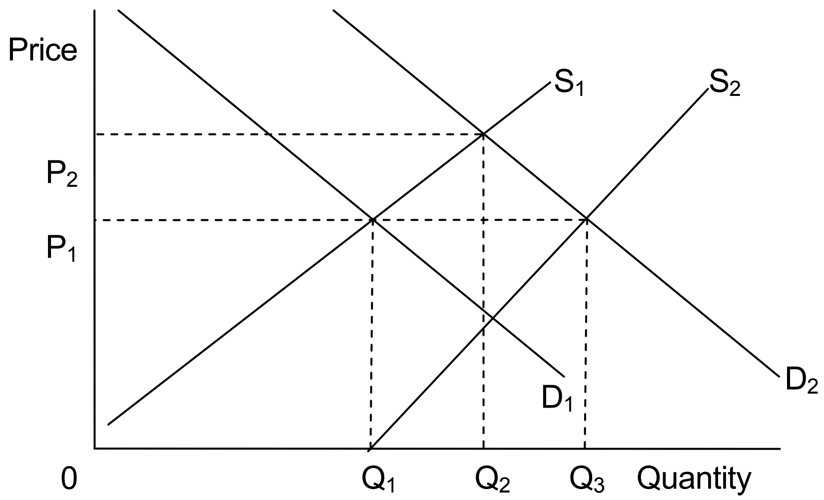
4 Contestable markets are most realistic.

(a) A market is said to be perfectly competitive when individually buyers and sellers believe that their own actions will have no influence on the market price.

Perfectly competitive markets do not exist in the real world; however agriculture and market gardening, and the foreign exchange markets are the closest examples, having many of the characteristics of perfect markets.

The assumptions of perfect competition:
1. There are a large number of buyers and sellers who buy and sell such a small amount that they cannot affect market demand or supply.
2. The firms produce homogeneous products.
3. There is perfect knowledge of market conditions for both buyers and sellers.
4. There are no barriers to entry. Firms are free to enter and leave the industry.

An increase in market demand will lead to an increase in the price firms receive for their products. In the short run, perfectly competitive firms will be able to earn supernormal profits. However, these supernormal profits will act as an incentive for new firms to enter the industry. Since there are no barriers to entry these new firms can enter the industry and increase supply until only normal profits are made by all firms.



P_1 and S_1 are the original demand and supply curves in the perfectly competitive industry. The equilibrium price and quantity are P_1 and Q_1.

Immediately after the increase in demand the demand curve moves to D_2, giving a new equilibrium price of P_2 and quality of Q_2. Firms in the industry are now earning supernormal profits.

In the long run these supernormal profits attract new firms into the industry and the supply curve shifts to S_2, returning the equilibrium price to P_1 but with a new quantity Q_3.

This process could also be illustrated by showing the impact of the rise in demand on the equilibrium of the individual firm in perfect competition.

Areas for analysis and discussion include:
- explanation of perfect competition
- assumption of model
- explanation of short run and long run equilibrium
- appropriate diagrams
- appropriate examples.

Level 1 ([1]–[5])
- candidate shows little understanding of how a perfectly competitive industry responds to an increase in demand
- quality of written communication is limited.

Level 2 ([6]–[10])
- candidate shows some understanding of how a perfectly competitive industry responds to an increase in demand
- quality of written communication is satisfactory.

Level 3 ([11]–[15])
- candidate shows clear and comprehensive understanding of how a perfectly competitive industry responds to an increase in demand in both the short run and the long run
- quality of written communication is of a high standard. [15]

(b) The model of perfect competition requires the existence of a number of highly abstract and unrealistic assumptions. These assumptions should have been outlined in part (a).

Clearly these assumptions are unlikely to be replicated in reality and as a result some economists have argued that the model is of little benefit to modern economists.

These economists argue that the other models in the traditional theory of the firm are also based on a number of unrealistic assumptions and therefore they too are of little use in explaining the behaviour of modern firms.

They argue that the theory of contestable markets provides a better framework for analysing the behaviour of firms in the real world since it does not require specific assumptions with regard to product homogeneity nor the number of firms in the industry. Indeed it is clear from recent decisions by both the OFT and the Competition Commission that the theory of contestable markets has played a much more prevalent role in their decision making.

However, it should be remembered that the theory of contestable markets is also based on a number of unrealistic assumptions, most notably the absence of barriers to exit (or sunk costs) and perfect knowledge. As Baumol himself stated "perfectly contestable markets do not populate the world of reality any more than perfectly competitive markets do".

Areas for analysis and discussion include:
- assumption of model of contestable markets
- examples of contestable markets
- discussion of unrealistic assumptions of perfect competition and the other models in the theory of the firm
- discussion of unrealistic assumptions of contestable markets
- discussion of economic models being used only as a framework or benchmark
- discussion of advances in behavioural economies and their influence on modern theories of oligopoly
- discussion of the success or otherwise of government policy, based on theory of contestable markets, e.g. US airline industry
- discussion of how these models are likely to be used as a tool for decision making in modern firms
- appropriate diagrams
- appropriate examples.

Level 1 ([1]–[7])
- candidate shows little understanding of the view that the theory of contestable markets provides the most realistic explanation of firms' behaviour
- there is no significant analysis or evaluation
- quality of written communication is limited.

Level 2 ([8]–[13])
- candidate shows some understanding of the view that the theory of contestable markets provides the most realistic explanation of firms' behaviour
- there is some attempt at analysis and evaluation
- quality of written communication is satisfactory.

Level 3 ([14]–[19])
- candidate shows in-depth understanding of the view that the theory of contestable markets provides the most realistic explanation of firms' behaviour
- there is significant analysis and evaluation of the arguments
- quality of written communication is of a high standard.

Level 4 ([20]–[25])
- candidate shows clear and comprehensive understanding of the view that the theory of contestable markets provides the most realistic explanation of firms' behaviour
- there is a thorough analysis and evaluation of the arguments
- quality of written communication is excellent. [25] 40

Total **80**