

**GCE AS**

**Economics**

**January 2009**

**Mark Scheme**

Issued: April 2009



MARK SCHEMES (2009)

Foreword

*Introduction*

Mark Schemes are published to assist teachers and students in their preparation for examinations. Through the mark schemes teachers and students will be able to see what examiners are looking for in response to questions and exactly where the marks have been awarded. The publishing of the mark schemes may help to show that examiners are not concerned about finding out what a student does not know but rather with rewarding students for what they do know.

*The Purpose of Mark Schemes*

Examination papers are set and revised by teams of examiners and revisers appointed by the Council. The teams of examiners and revisers include experienced teachers who are familiar with the level and standards expected of 16- and 18-year-old students in schools and colleges. The job of the examiners is to set the questions and the mark schemes; and the job of the revisers is to review the questions and mark schemes commenting on a large range of issues about which they must be satisfied before the question papers and mark schemes are finalised.

The questions and the mark schemes are developed in association with each other so that the issues of differentiation and positive achievement can be addressed right from the start. Mark schemes therefore are regarded as a part of an integral process which begins with the setting of questions and ends with the marking of the examination.

The main purpose of the mark scheme is to provide a uniform basis for the marking process so that all the markers are following exactly the same instructions and making the same judgements in so far as this is possible. Before marking begins a standardising meeting is held where all the markers are briefed using the mark scheme and samples of the students' work in the form of scripts. Consideration is also given at this stage to any comments on the operational papers received from teachers and their organisations. During this meeting, and up to and including the end of the marking, there is provision for amendments to be made to the mark scheme. What is published represents this final form of the mark scheme.

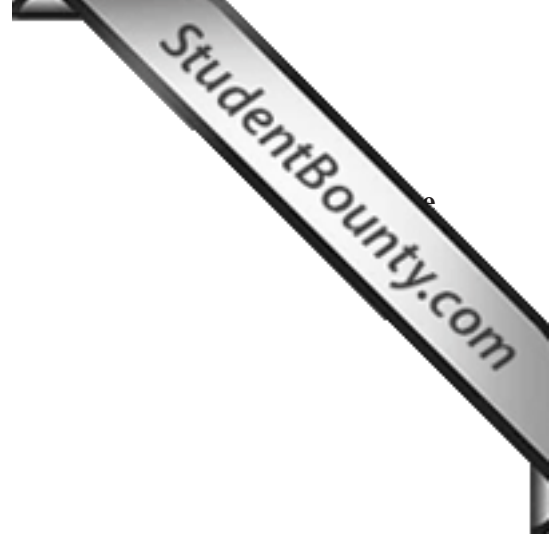
It is important to recognise that in some cases there may well be other correct responses which are equally acceptable to those published: the mark scheme can only cover those responses which emerged in the examination. There may also be instances where certain judgements may have to be left to the experience of the examiner, for example, where there is no absolute correct response – all teachers will be familiar with making such judgements.

The Council hopes that the mark schemes will be viewed and used in a constructive way as a further support to the teaching and learning processes.



## CONTENTS

A2 1: Module 3







*Rewarding Learning*

**ADVANCED**  
**General Certificate of Education**  
**January 2009**

---

## **Economics**

**Assessment Unit A2 1**

*assessing*

**Module 3: Production  
and Competition**

**[A2E11]**

**WEDNESDAY 28 JANUARY, MORNING**

---

# **MARK SCHEME**

This mark scheme is intended to ensure that the A2 examination is marked consistently. The mark scheme provides markers with an indication of the nature and range of candidate responses that are worthy of credit. It also sets out the criteria which they should apply in allocating marks to 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 papers, examiners will be looking for a quality of response reflecting the level of maturity which may reasonably be expected of an 18-year-old which is the age at which the majority of candidates sit their A2 examinations.

### **Unanticipated responses**

The mark schemes which accompany the specimen examination papers are 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 and to refer for guidance to the general marking criteria that follow. 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 an 18-year-old A2 candidate. Conversely, marks should only be awarded for valid responses and not given for an attempt which is completely incorrect or 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.

### **Marking calculations**

In marking answers involving calculations, examiners should apply the 'own figure rule' so that 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 all 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.



## Levels of response

General descriptions of levels of response in terms of each assessment objective and the quality of written communication are given in the following table. These descriptions are intended to assist examiners in judging candidates' performance when they produce answers unanticipated by the detailed mark schemes for each question and to provide guidelines for examiners in assessing the appropriate level of response in respect of the quality of written communication.

The detailed mark schemes for each question relate these levels of response to the content of the relevant question. In deciding which mark within a particular level to award 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 this 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.

**General Marking Criteria**

| <b>Level of Performance</b> | <b>Assessment Objective</b> | <b>AO1 Knowledge and Understanding</b>   | <b>AO2 Application</b>  | <b>AO3 Analysis</b>   | <b>AO4 Evaluation and judgement</b>   |
|-----------------------------|-----------------------------|--|---|---|---|
| <b>BENEATH THRESHOLD</b>    | <b>LEVEL 1</b>              | There may be limitations in the candidate's grasp of theoretical principles, resulting in an excessively narrow focus on the issues involved in the question.  | The candidate tends to make unsubstantiated generalisations, and superficial assumptions, lacking any real awareness of contemporary events.                                | The candidate is likely to confuse hypotheses with facts and does not successfully account for divergences between theoretically predicted and actual outcomes of events or decisions in a real economy.  | The candidate finds it difficult to pinpoint strengths or limitations of economic models and theories in explaining real world issues and problems, or to compare and contrast alternative strategies or policy instruments.  |
|                             |                             | 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 with little use of specialist vocabulary. Presentation, spelling, punctuation and grammar may be such that intended meaning is not clear.   | The candidate makes valid connections between theoretical principles and real-world events.   | The candidate shows ability to identify causes of economic problems and is able to relate these insights to real economies.   | The candidate shows some awareness of the strengths and limitations of different economic models, theories, decisions and policies, and attempts to support observation with appropriate references.  |
| <b>HIGH GRADE</b>           | <b>LEVEL 3</b>              | The candidate shows sufficient knowledge of economic theory for the main issues involved in the question to be satisfactorily identified.  | The candidate relates concepts to situations and problems in real economies with some skill and can explain contemporary events while supporting conclusions with evidence. | The candidate is aware of the implications of hypotheses and distinguishes between association and causation in contemporary economic problems, offering valid suggestions as to how these may be addressed.  | The candidate is able to critically examine alternative economic models, theories, arguments and policies in the analysis of economic problems and demonstrates the ability to evaluate the outcomes of economic decisions, supporting this with accurate reference or relevant examples. |
|                             |                             | The candidate makes a reasonable attempt to select and use an appropriate form and style of writing, supported with appropriate use of diagrams. Relevant material is organised with some clarity and coherence and some use of specialist vocabulary. Presentation, spelling, punctuation and grammar are sufficiently competent to make meaning evident. | The candidate has a detailed knowledge of economic theory and shows a clear understanding of its significance in the specific contexts of the question.                     | The candidate successfully selects and uses an appropriate form and style of writing, supported with the effective use of diagrams where appropriate. Material is organised with a high degree of clarity, coherence and widespread use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are of a sufficiently high standard to make meaning absolutely clear. |   |

- 1 (a) Barriers to entry are factors which make it difficult or impossible for firms to enter an industry and compete with existing producers. A typical example would be a legal barrier such as patent protection.  
[2] for definition, [2] for example  
Constrained maximum of [3]
- (b) Economic theory tends to favour free competition rather than barriers to entry. However, in the pharmaceutical industry firms spend a great deal on researching and developing new drugs. Without patent protection this money would be wasted as rival firms would immediately copy the medication and drive down the price. This would leave the originator of the drug with no return on its investment in research and development (R & D).  
(maximum [4])  
Eventually firms would stop carrying out R & D and patients would suffer.  
(maximum [2])  
For regulation aimed at protecting patients from sub-standard medication.  
(maximum [3])
- (c) Barriers to entry give a firm a monopoly position for that drug. This enables them to profit-maximise by equating marginal cost and marginal revenue. This may be shown by the standard monopoly or oligopoly diagrams.  
For diagram without explanation max top L2.  
For explanation without diagram max bottom L2.

#### Level 1 ([1]–[2])

Candidate provides no meaningful explanation of how barriers to entry enable a firm to earn long run supernormal profits. Quality of written communication is limited.

#### Level 2 ([3]–[4])

Candidate provides some explanation of how barriers to entry enable a firm to earn long run supernormal profits. However, the explanation may be incomplete or contain errors, and quality of written communication is satisfactory.

#### Level 3 ([5]–[6])

Candidate provides a clear explanation both in diagram and prose of how barriers to entry enable a firm to earn long run supernormal profits. Quality of written communication is of a high standard.

- (d) (i) “Evergreening” is a ploy which pharmaceutical companies use to prevent competitors from distributing a generic version of a drug on which they had once held a patent. It effectively extends the period of patent protection.
- (ii) Devices used in “evergreening” include:
- Producing an almost exactly similar drug to the original but with a slightly different name, e.g. Gaviscon Advanced.
  - Intensive marketing to GPs.
  - Lobbying of regulatory authorities to prevent distribution of generic drugs.
- [2] for each point explained  
Constrained maximum of [4]

- (e) Since the NHS is an almost monopsonistic purchaser it is in a strong position to dictate prices to pharmaceutical suppliers. However, imposing a system of cost-plus pricing has both advantages and disadvantages for the NHS.

Issues for analysis and evaluation include:

- Explanation of cost-plus pricing.
- Problems and costs associated with calculating and enforcing the cost-plus formula.
- Many pharmaceutical companies are trans-national companies and can easily shift production between countries. This would enable them to artificially inflate costs.
- Removal of incentives for pharmaceutical companies to increase efficiency and cut costs.
- Possible reduction in R and D activity, leading to a fall in the rate of medical advance.
- Beneficial impact of cost saving upon the NHS.

**Level 1 ([1]–[3])**

Candidate provides no meaningful evaluation of the desirability of imposing a cost-plus pricing formula upon pharmaceutical firms. Key issues are not addressed, and quality of written communication is limited.

**Level 2 ([4]–[6])**

Candidate provides some evaluation of the desirability of imposing a cost-plus pricing formula upon pharmaceutical firms. This evaluation may lack depth or be one-sided. Most key issues are addressed, though their treatment may be incomplete or contain errors. Quality of written communication is satisfactory.

**Level 3 ([7]–[9])**

Candidate provides a meaningful evaluation including a balanced conclusion of the desirability of imposing a cost-plus pricing formula upon pharmaceutical firms. Key issues are addressed comprehensively and accurately, and quality of written communication is of a high standard.

- 2 (a) Normal profit is the minimum profit which a firm must make in order to prevent it moving its economic resources to the production of another good. It is an economic cost.

Appropriate development:

- Relate to rate of return on capital.
- Refer to risk premium.
- Examples.
- Use of diagram.

**Level 1 ([1]–[2])**

Candidate shows no significant understanding of normal profit. The definition is seriously flawed and there is no development. Quality of written communication is limited.

**Level 2 ([3]–[4])**

Candidate shows some understanding of normal profit. There is a definition which will typically contain errors and some limited development. Quality of written communication is satisfactory.

**Level 3 ([5]–[6])**

Candidate shows a clear understanding of normal profit. There is an accurate definition supported by appropriate development. Quality of written communication is of a high standard.

- (b) The long run equilibrium of the firm in both perfect and monopolistic competition is one in which only normal profits are earned. This may also be true in a perfectly contestable market. However, the process by which this is achieved is different in each market structure.
- In the case of perfect competition the existence of perfect knowledge and the absence of barriers to entry means that supernormal profits will inevitably attract in new firms, hence increasing market supply and reducing price until only normal profits are earned.
  - Monopolistic competition differs from perfect competition in that member firms produce differentiated products. Supernormal profits may cause an influx of new firms into the general industry but not replicating the exact branded product. So there will be a fall in demand rather than a rise in supply.
  - In the case of a perfectly contestable market it is the fear of new entrants which prevents an existing supplier from abusing its market dominance. It may therefore set a price which enables it to earn normal profits only and which removes the danger of competition from new entrants.

Issues for analysis and discussion include:

- Features of perfect competition.
- Features of monopolistic competition.
- Features of contestable markets.
- Use of appropriate diagrams.

**Level 1 ([1]–[4])**

Candidate provides no significant analysis of why normal profits are achieved in the long run in any of the market structures. There is no meaningful economic analysis, and quality of written communication is limited.

**Level 2 ([5]–[8])**

Candidate provides some analysis of why normal profits are achieved in the long run. This may be a sound analysis of one structure, a reasonable analysis of two or a shallow analysis of all three structures. Quality of written communication is satisfactory.

**Level 3 ([9]–[12])**

Candidate provides a clear analysis of why normal profits are achieved in the long run. At least two structures are dealt with in some depth, and quality of written communication is of a high standard.

- (c) The assumption that firms will always attempt to maximise profits by equating marginal cost and marginal revenue lies at the core of traditional microeconomic analysis of firms' behaviour. However, there is considerable evidence that firms' objectives are much more complex than this.

Issues for analysis and evaluation include:

- Firms may lack the information to equate marginal cost and marginal revenue.
- Fear of intervention by competition authorities.
- Importance of public image.
- Divorce of ownership from control.
- Long and short run interests of the firm.
- Alternative objectives, e.g. satisficing.
- Fear of take over if profits not maximised.

#### **Level 1 ([1]–[4])**

Candidate shows little or no understanding of why firms may not aim for maximum profits nor of what other objectives they may have. There is no significant evaluation, and quality of written communication is limited.

#### **Level 2 ([5]–[8])**

Candidate shows some understanding of why firms may not aim for maximum profits and of what other objectives they may have. There is a degree of evaluation although this may lack depth or be one-sided. Quality of written communication is satisfactory.

#### **Level 3 ([9]–[12])**

Candidate shows a clear understanding of why firms may not aim for maximum profits and of what other objectives they may have. There is significant evaluation including a balanced conclusion, and quality of written communication is of a high standard.

- 3 (a) In the short run the firm will have some costs such as rent which are unaffected by the level of output and some such as direct materials which are directly affected by the level of output. Rent is an example of a fixed cost and materials are an example of a variable cost.

Appropriate development:

- Explanation of short run.
- Examples of fixed costs.
- Examples of variable costs.

#### **Level 1 ([1]–[2])**

Candidate shows little knowledge or understanding of fixed and variable costs and there is no significant development. Quality of written communication is limited.

#### **Level 2 ([3]–[4])**

Candidate shows some knowledge and understanding of fixed and variable costs and there is a degree of development. Quality of written communication is satisfactory.

#### **Level 3 ([5]–[6])**

Candidate shows clear knowledge and understanding of fixed and variable costs and there is significant development. Quality of written communication is of a high standard. [6]



- (b) Marginal product is the increase in output when one more unit of a variable factor is employed. The Law of diminishing returns states that this will eventually decline due to over-utilisation of fixed factors such as land and capital. This will cause marginal cost to rise since

$$MC = \frac{\text{Change in total cost}}{\text{Change in output}}$$

Any fall in the change in output must increase marginal cost.

Issues for analysis and discussion include:

- Explanation of law of diminishing returns.
- Distinction between fixed and variable factors.
- Explanation of marginal product.
- Explanation of link between law of diminishing returns and marginal product.
- Explanation of link between marginal product and marginal cost.
- Use of appropriate diagram.

#### **Level 1 ([1]–[4])**

Candidate provides no significant analysis of how the law of diminishing returns affects marginal product and marginal cost. Key linkages are ignored, and quality of written communication is limited.

#### **Level 2 ([5]–[8])**

Candidate provides some analysis of how the law of diminishing returns affects marginal product and marginal cost. Most key linkages are explained though this may be incomplete or contain errors. Quality of written communication is satisfactory.

#### **Level 3 ([9]–[12])**

Candidate provides an accurate analysis of how the law of diminishing returns affects marginal product and marginal cost. Key linkages are clearly explained and quality of written communication is of a high standard. [12]

- (c) It is certainly true that leasing of capital and premises makes it much easier to increase capacity than the explanation given in standard text books. It is also true that employment protection legislation makes it harder to treat units of labour as a totally variable factor.

However, to totally abandon the distinction would make it much harder for firms to make efficient decisions. For instance, break-even analysis could never be applied and firms would be less definitive about when to close an unprofitable business.

Issues for analysis and evaluation include:

- Problems of classification of costs.
- Increase in importance of semi-fixed costs.
- Uses of fixed and variable cost distinction in business decision-making.

#### **Level 1 ([1]–[4])**

Candidate provides no significant evaluation of the proposition. The grey area between fixed and variable costs is not explained, and quality of written communication is limited.

**Level 2 ([5]–[8])**

Candidate provides some evaluation of the proposition. However, this evaluation may lack depth or be one-sided. There is an attempt at explaining the grey area between fixed and variable costs though this may be incomplete or contain errors. There may also be an attempt at explaining how difficult business decision-making would be without this distinction. Quality of written communication is satisfactory.

**Level 3 ([9]–[12])**

Candidate provides in-depth evaluation of the proposition and this includes a balanced conclusion. There is a clear explanation of the grey area between fixed and variable costs. There is also a clear explanation of how difficult business decision-making would be without this distinction. Quality of written communication is of a high standard.

[12]

30

**Total**

**60**