

**Published Mark Scheme for  
GCE AS Economics**

**January 2009**



**NORTHERN IRELAND GENERAL CERTIFICATE OF SECONDARY EDUCATION (GCSE)  
AND NORTHERN IRELAND GENERAL CERTIFICATE OF EDUCATION (GCE)**

**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.



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New  
Specification



*Rewarding Learning*

**ADVANCED SUBSIDIARY (AS)  
General Certificate of Education  
January 2009**

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## **Economics**

**Assessment Unit AS 1**

**Markets and Prices**

**[AE111]**

**FRIDAY 16 JANUARY, MORNING**

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**MARK  
SCHEME**

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- 1 (a) At the start of 1994 the price of oil was \$14 per barrel.
- By the end of 2007 the price of oil had risen to \$90.
  - This represents a rise of 543 per cent.
  - The low point for the price of oil was \$12 per barrel at the end of 1998.
  - From 1994 until 1998 oil prices were relatively low and quite stable.
  - The largest rise in oil prices started at end 2001.

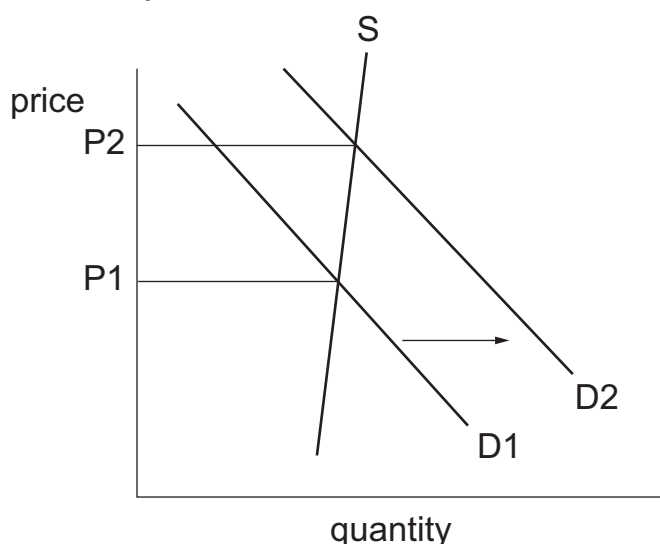
[1] for each relevant point made within reasonable margins of error in interpretation.

[2] for calculating percentages.

Constrained maximum of 4 marks.

(b) Issues for analysis and discussion:

- Candidates should show a rise in demand as a result of economic expansion in China and India.
- Candidates should show an inelastic supply curve because of a shortage of reserves and also production limits set by OPEC.



[4] for showing rightward shift in demand curve and giving an explanation.

[4] for showing inelastic supply curve and giving an explanation.

[1] for showing rise in price.

(c) Paragraph 4 indicates that demand for oil is price inelastic by stating that it is an essential item and that the rising price has not significantly reduced demand.

Paragraph 2 indicates that oil is a normal good in that demand for it rises with rising incomes in China and India.

[2] for selecting appropriate information for both price and income elasticity

[2] marks for explaining the relationship in each case.

- (d) As oil prices rise there is little which consumers can do to reduce consumption. However, if oil prices remain high then consumers can become more energy efficient in a variety of ways such as installing solar panels and double glazing. Motorists can switch to cars which use ethanol or with much reduced petrol consumption. Paragraph 9 of the passage points out that the government could subsidise alternative energy sources and encourage energy efficiency in a variety of other ways. However, this process of adjustment could not take place overnight since it obviously requires time to install solar panels and so on.

**Level 1 ([1]–[2])**

Candidate shows little or no understanding of how the price elasticity of demand for oil may vary over time and quality of written communications is limited.

**Level 2 ([3]–[4])**

Candidate shows some understanding of how the price elasticity of demand for oil may vary over time. The relationship is explained in basic terms but there is only limited development. Quality of written communication is satisfactory.

**Level 3 ([5]–[6])**

Candidate shows a clear understanding of how the price elasticity of demand for oil may vary over time. The relationship is explained clearly and there is significant development. Quality of written communication is of a high standard.

- (e) Oil prices peaked at \$80 a barrel in 1980. However, the real value of currency generally falls over time and so it would require \$101 of today's money to buy what \$80 could purchase in 1980.

[1] for reference to inflation.

[2] for reference to real value of money.

[1] for use of data.

Constrained maximum of 3 marks.

- (f) Government-imposed price controls will be beneficial to some consumers, detrimental to others and universally bad for producers.

Economic theory tends on balance to be against such intervention except as a very short-term palliative in extreme circumstances.

Issues for analysis and evaluation include:

- Explanation and definition of maximum price controls.
- Relationship to equilibrium price.
- Creation of excess demand and black markets.
- Impact on consumer and producer surplus.
- Explanation that the magnitude of the impact depends upon the price elasticities of demand and supply.
- Problems and costs of enforcement.
- Long term impact on oil exploration and development.
- Appropriate diagrams.
- Social and political implications.
- Historical examples.

### **Level 1 ([1]–[3])**

Candidate shows at best a very basic understanding of price controls. There is no significant analysis of their impact on welfare and no meaningful evaluation of their overall desirability. Quality of written communication is limited.

### **Level 2 ([4]–[7])**

Candidate shows some understanding of price controls. There is a degree of analysis of their impact on welfare and some evaluation of their overall desirability. Quality of written communication is satisfactory.

### **Level 3 ([8]–[10])**

Candidate shows a clear understanding of price controls. There is extensive analysis of their impact on welfare and a measured evaluation of their overall desirability. Quality of written communication is of a high standard.

- 2 (a) How to allocate scarce resources is at the core of economics. If it were not for the existence of scarcity we would not have to make economic decisions. So resource allocation is an issue which faces all societies and is sometimes referred to as the basic economic problem. It is quite simply deciding what, how much and for whom to produce from the limited resources available.

Appropriate Development.

- Description of economic resources.
- Reference to their scarce nature and occupational mobility.
- Reference to unlimited nature of human wants and aspirations.
- Appropriate examples.
- Illustration through production possibility curve.
- Reference to different methods of resource allocation.

[4] for definition

[6] for development.

### **Level 1 ([1]–[3])**

Candidate shows little understanding of resource allocation.

There may be a flawed definition and no significant development in terms of appropriate examples, diagrams or technical language. Quality of written communication is limited.

### **Level 2 ([4]–[7])**

Candidate shows some knowledge and understanding of resource allocation. There will typically be a slightly imperfect definition and a degree of development in terms of appropriate examples, diagrams or technical language. Quality of written communication is satisfactory.

### **Level 3 ([8]–[10])**

Candidate shows a clear knowledge and understanding of resource allocation. There is a clear definition and extensive development in terms of appropriate examples, diagrams or technical language and quality of written communication is of a high standard.

- (b) In free markets there is no significant government intervention and resources are controlled and directed by entrepreneurs who will always use them in the manner which yields the greatest profit. However, profit is a function of consumer demand and price, meaning that resources should be drawn to those areas of production which generate the greatest welfare (utility) for consumers. Prices can act as both a rationing and a signalling device. This process could be illustrated through demand and supply analysis:

Issues for analysis and discussion include:

- Features of free markets.
- Role of entrepreneurs.
- Functions of price and profit.
- Use of appropriate diagrams.
- Use of appropriate examples.
- Role of factor and product markets.

**Level 1 ([1]–[5])**

Candidate provides little or no explanation of how free markets allocate scarce resources. There is no serious analysis through diagrams, technical language or economic models. Quality of written communication is limited.

**Level 2 ([6]–[10])**

Candidate provides some explanation of how free markets allocate scarce resources. There is a degree of analysis through diagrams, technical language or economic models. Quality of written communication is satisfactory.

**Level 3 ([11]–[15])**

Candidate provides a clear explanation of how free markets allocate scarce resources. There is extensive analysis through diagrams, technical language or economic models. Quality of written communication is of a high standard.

- (c) Candidates can point out that a large number of products are successfully and efficiently delivered by market forces. Good candidates may demonstrate the welfare efficiency of markets by use of the tools of consumer and producer surplus. Evaluation of markets, based on this type of analysis assumes that the market price fully reflects all society's benefits and costs. However, where there are significant externalities this will not be the case and the market will have FAILED to deliver the best pattern of resource allocation. Other areas of MARKET FAILURE such as extreme inequality and monopoly power may be cited as examples of situations which require government intervention. Credit will be given for the use of appropriate diagrams.

Issues for analysis and discussion include:

- Explanation of what constitutes the "best pattern of resource allocation".
- Evaluation using the concepts of consumer and producer surplus.
- Evaluation using the concepts of productive and allocative efficiency.
- Reference to types and causes of market failure.
- Reference to historical and international examples including the former communist states.
- Reference to other methods of resource allocation.
- Use of appropriate diagrams.

**Level 1 ([1]–[5])**

Candidate displays little understanding of the case for and against the view that free markets deliver a better pattern of resource allocation than government control. There is no serious attempt at assessing arguments and evidence and few if any conclusions are stated. Quality of written communication is limited.

**Level 2 ([6]–[10])**

Candidate displays some understanding of the case for and against the view that free markets deliver a better pattern of resource allocation than government control. There is a serious attempt at assessing arguments and evidence and some conclusions are presented. Quality of written communication is satisfactory.

**Level 3 ([11]–[15])**

Candidate displays a clear understanding of the case for and against the view that free markets deliver a better pattern of resource allocation than government control. There is extensive assessment of arguments and evidence and significant conclusions are presented. Quality of written communication is of a high standard.

- 3 (a) Externalities exist when the choices of an economic agent have spillover effects upon others or upon society as a whole. When these spillovers are beneficial they are referred to as positive externalities. For example, inoculation against disease protects not just the recipient but also society at large by reducing the dangers of an epidemic.

When spillovers impose costs, financial and non-financial, then they are referred to as negative externalities. Obvious examples are pollution and the inhalation of passive smoke. Appropriate Development.

- Range of examples.
- Description of the nature of external costs and benefits and how they are received.
- Uncertainty of valuation.
- Reference to merit and de-merit goods.

[4] marks for definition.

[6] for development.

**Level 1 ([1]–[3])**

Candidate shows no meaningful understanding of externalities. There may be a highly flawed definition but no significant development and quality of written communication is limited.

**Level 2 ([4]–[7])**

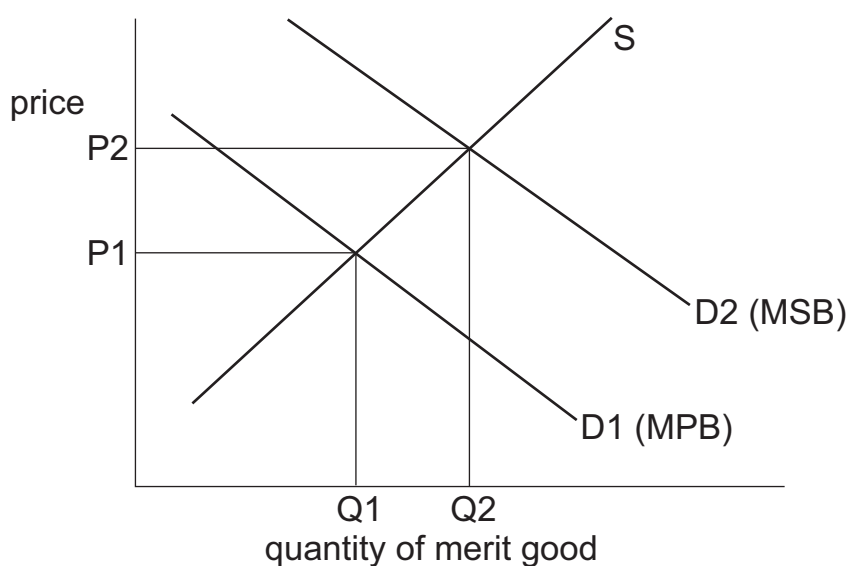
Candidate shows some understanding of externalities. There may be a slightly flawed definition with a degree of development and quality of written communication is satisfactory.

**Level 3 ([8]–[10])**

Candidate shows a clear understanding of externalities. There will be an accurate definition and significant development. Quality of written communication is of a high standard.

- (b) Merit goods are those which society believes to be beneficial and whose production and consumption is encouraged by government.

This is often because of the existence of significant external benefits which cause the social demand curve to be higher than the private demand curve. Hence the socially optimal price and output will be higher than the free market price and output.



The free market demand for a merit good, based solely on its marginal private benefits (MPB), is D1.

Society’s demand curve which reflects both private and external benefits (MSB) is D2.

Hence the free market price and output are P1 and Q1 respectively whilst the socially optimal price and output are P2 and Q2 respectively.

This divergence between the private provision and the socially optimal level is filled by government which provides most education and health care free at point of use.

Issues for analysis and discussion include:

- Explanation of the external benefits of merit goods such as education and health care.
- Paternalistic view of merit goods where the state decides for consumers what is best for them.
- Possible divergence of interests between purchasers (parents) and consumers (children).
- Explanation of how lack of information may cause under-consumption of merit goods.
- Historical role of churches and charities as providers of merit goods.

### **Level 1 ([1]–[5])**

Candidate provides little analysis of the reasons for under-consumption of merit goods. Key issues such as the existence of external benefits are not seriously addressed and quality of written communication is limited.

### **Level 2 ([6]–[10])**

Candidate provides some analysis of the reasons for under-consumption of merit goods. Most key issues are addressed, albeit imperfectly, and quality of written communication is satisfactory.

### **Level 3 ([11]–[15])**

Candidate provides extensive analysis of the reasons for under-consumption of merit goods. Key issues are clearly addressed and quality of written communication is of a high standard.

- (c) The most important policy which governments use to increase consumption of merit goods is direct provision free at point of use.

Most education and healthcare is provided in this way. Other relevant policies are grants and subsidies for the arts, sport and community development. Advertising campaigns are also used to increase health awareness.

In critically examining these policies candidates should focus on issues like cost of provision, efficiency of delivery and overall social impact.

Issues for analysis and evaluation include:

- Description of policies to encourage consumption of merit goods.
- Cost of these policies.
- Efficiency and productivity in delivery.
- Impact on the community e.g. levels of disease etc.

- Problem of demonstrating links between merit good provision and socially desirable outcomes. For example, does education help to reduce crime and anti-social behaviour?

**Level 1 ([1]–[5])**

Candidate provides no significant evaluation of the main government policies to encourage consumption of merit goods. There may be a brief description of some policies but no serious analysis nor evaluation of their cost and benefits. Quality of written communication is limited.

**Level 2 ([6]–[10])**

Candidate provides some evaluation of the main government policies to encourage consumption of merit goods though this will typically lack depth. Quality of written communication is satisfactory.

**Level 3 ([11]–[15])**

Candidate provides an in-depth evaluation including a balanced conclusion of the main government policies to encourage consumption of merit goods. There will be a serious analysis of their costs and benefits and quality of written communication is of a high standard.

- 4 (a) Economic rent was a concept first devised by David Ricardo in the early 19th century. It showed how a factor of production could earn rewards far greater than the amount needed to recruit and retain it. So, if a worker could be hired for £6 per hour but actually receives £10 per hour then he or she is receiving £4 of economic rent. The remaining £6 is known as transfer earnings and is determined by what he or she could earn in his or her next most desired occupation. The ability of factors to earn economic rent is related to their elasticity of supply.
- Appropriate development.
- Numerical example.
  - Appropriate diagram.
  - Examples relating to highly paid workers and groups of workers.
  - Reference to barriers to entry and elasticity of supply.
- [4] for definition.  
[6] for development.

**Level 1 ([1]–[3])**

Candidate shows little knowledge or understanding of economic rent. There is little or no development in terms of appropriate examples, diagrams or technical language. Quality of written communication is limited.

**Level 2 ([4]–[7])**

Candidate shows some knowledge and understanding of economic rent. There is a degree of development in terms of appropriate examples, diagrams or technical language. Quality of written communication is satisfactory.

**Level 3 ([8]–[10])**

Candidate shows an in-depth knowledge and understanding of economic rent. There is extensive development in terms of appropriate examples, diagrams or technical language. Quality of written communication is of a high standard.

- (b) A common feature of highly paid jobs is that they are beyond the capacity of most people. This could be for a variety of reasons such as natural ability, training and qualifications required or in some cases discrimination acting as a barrier to entry. This means that the supply of labour will be relatively inelastic and workers can earn high levels of economic rent. Low paid jobs tend to be those which most people could perform, meaning that supply is elastic and there is little scope for workers to earn economic rent.

Issues for analysis and evaluation include:

- Explanation of elasticity of supply of labour.
- Relationship between elasticity of supply of labour and economic rent.
- Explanation of the barriers to entry which create economic rent.
- Appropriate diagrams.

**Level 1 ([1]–[5])**

Candidate provides no significant analysis of labour markets or of the relevance of economic rent to income inequality. Quality of written communication is limited.

**Level 2 ([6]–[10])**

Candidate provides some analysis of labour markets or of the relevance of economic rent to income inequality. Quality of written communication is satisfactory.

**Level 3 ([11]–[15])**

Candidate provides clear and accurate analysis of labour markets and of the relevance of economic rent to income inequality. Quality of written communication is of a high standard.

- (c) The most important policy for reducing inequality is the tax and benefit system. Hence candidates should focus on the impact of high rates of progressive tax and high levels of welfare payments. Other relevant policies might be equal pay and anti-discrimination legislation, the National Minimum Wage and the free provision of merit goods such as education.

Issues for analysis and evaluation include:

- Explanation of progressive tax.
- Disincentive effects of high tax.
- Laffer curve.
- Social benefits of reduced inequality e.g. lower crime rates.
- Benefits in cash and benefits in kind.
- Problems of means-testing.
- Impact on economic growth.
- Costs of regulation and enforcement.

**Level 1 ([1]–[5])**

Candidate shows little understanding of the policies by which governments might attempt to reduce economic inequality and provides no meaningful evaluation. Quality of written communication is limited.

**Level 2 ([6]–[10])**

Candidate shows some understanding of the policies by which governments might attempt to reduce economic inequality and provides a degree of evaluation. Quality of written communication is satisfactory.

**Level 3 ([11]–[15])**

Candidate shows clear and extensive understanding of the policies by which governments might attempt to reduce economic inequality. There is meaningful evaluation, including a balanced conclusion and quality of written communication is of a high standard.