

New
Specification



Rewarding Learning

**ADVANCED SUBSIDIARY (AS)
General Certificate of Education
2017**

Economics

Assessment Unit AS 1

assessing

Markets and Market Failure

[SEC11]

MONDAY 15 MAY, MORNING

**MARK
SCHEME**

General Marking Instructions

This mark scheme is intended to ensure that the AS examinations are marked consistently and fairly. The mark scheme provides examiners with an indication of the nature and range of candidate responses likely to be worthy of credit. It also sets out the criteria which they should 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 papers, examiners will be looking for a quality of response reflecting the level of maturity which may reasonably be expected of 17-year-olds, which is the age at which the majority of candidates sit their AS 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 17-year-old candidates. 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. Some material may be included in the mark scheme for the benefit of teachers and pupils preparing for future examinations. Candidates are not expected to have provided this information. Such material is printed in the mark scheme in italics.

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 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 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.

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.

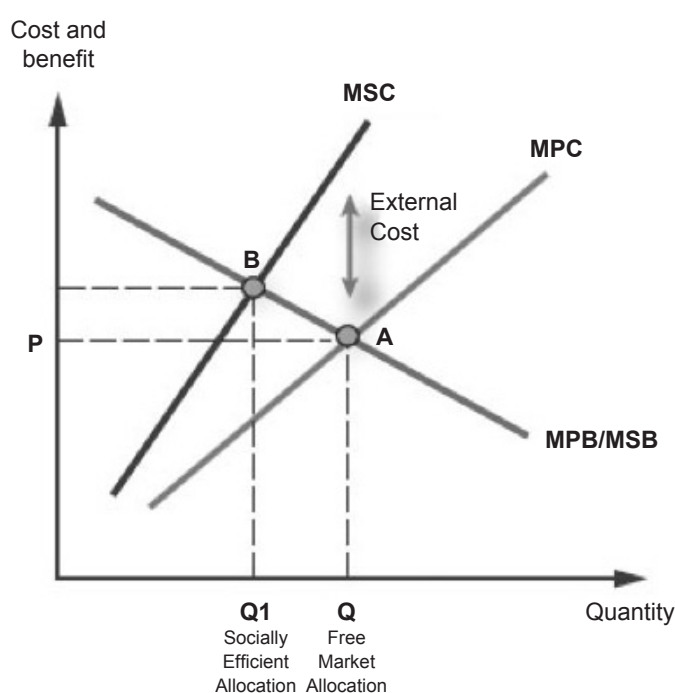
Level 3 (High Standard): The candidate successfully selects and uses an appropriate form and style of writing, supported with the effective use of diagrams where appropriate. Relevant material is organised with a high degree of clarity and coherence. There is widespread use of appropriate specialist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

Section A

			AVAILABLE MARKS
1	For definition of public good as being a good that is both non-rival and non-excludable [2] For application to a flood defence system [2]	[4]	4
2	<p>(a) total tax = £3.68 + (16.5% of £7.98 =£1.3167) + (16.67% of £7.98 = £1.3302)= £6.3269 to the nearest penny = £6.33 For correct answer [3] Up to [2] for correct methodology but error in calculation [3]</p> <p>(b) Up to [2] for explanation of a regressive tax as being where the percentage of income paid in tax increases as income decreases</p> <p>Up to [2] for explanation that £6.33 represents a higher percentage of a poor person’s income who earns, for example, £100 per week (6.33%) than of a rich person’s income who earns, for example, £1000 per week (0.633%). Constrained maximum: [3]</p>	[3]	6
3	For explanation that a positive statement is one which can be proved or disproved with reference to facts [1] For explanation that a normative statement is one which cannot be proved or disproved with reference to facts as it contains value judgements [1] For selection of appropriate examples from the question [1]	[3]	3
4	<p>(a) For stating that data suggests that beer and spirits are complements [1] For stating explanation that it is due to the negative XED coefficient [1]</p> <p>(b) For stating that quantity demanded will fall by 4.56% [4]</p> <p>Where an incorrect answer is given award method marks for the following:</p> <ul style="list-style-type: none"> • For identification of appropriate formula [1] • For selection of appropriate data [1] • For accurate calculation of percentage change [1] • For identification that QD will fall [1] 	[4]	6

5 Answers may include:

- Allocative efficiency is achieved when the cost of producing a good is equal to the value consumers place on the good which is reflected in the price they are willing to pay.
- The production of shale gas produces significant external costs, which means that the marginal social cost (MSC) of production is significantly higher than the marginal private cost (MPC).
- These external costs include: increased greenhouse gas emissions, contamination of water supplies and an increase in seismic activity.
- In a free market firms will produce at point A where MPC is equal to the MPB/MSB (demand) as shown on the diagram.
- However this level of production represents an inefficient allocation of resources since the price does not equal the full marginal social cost of production.
- The only point at which price equals MSC is point B.



Level 1 ([1]–[2])

A basic response provides an answer that demonstrates:

- Basic knowledge and understanding of relevant terminology, concepts, principles and models.
- Basic application of relevant economic principles, terminology, concepts and models to the context of the question; limited use of relevant data, and diagrams to address the issues in the question.
- Basic analysis that may lack focus.
- A low quality of written communication.

Level 2 ([3]–[4])

A good response provides an answer that demonstrates:

- Good knowledge and understanding of relevant terminology, concepts, principles and models.
- Good application of relevant economic principles, terminology, concepts and models to the context of the question; data and diagrams are used

reasonably to address the issues in the question.

- Good analysis in relation to the impact on economic agents; analysis may not be developed fully or may have some inaccuracy at times.
- A good quality of written communication.

Level 3 ([5]–[6])

An excellent response provides an answer that demonstrates:

- Excellent accurate knowledge and understanding of relevant terminology, concepts, principles and models.
- Excellent application of relevant economic principles, terminology, concepts and models to the context of the question; data and diagrams are used effectively to address the issues in the question.
- Well focused, relevant analysis used accurately and appropriately in relation to the impact on economic agents.
- An excellent quality of written communication. [6]

Section A

**AVAILABLE
MARKS**

6

25

Section B
Data Response

**AVAILABLE
MARKS**

6 (a) Answers may include:

- Price of oil and petrol follow similar trends
- Fluctuations in oil prices greater than fluctuations in petrol prices
- **Oil price changes**
 - In Jan 2009 oil was approximately \$48 per barrel.
 - Oil prices increased to a peak of approximately \$125 per barrel in March 2011 (an increase of approximately 160%)
 - Oil price declined slowly (with fluctuations) to about \$110 per barrel in mid-2014
 - Oil price fell significantly over next 6 months falling to \$50 per barrel at end of 2014 (a fall of 55%)
- **Petrol price changes**
 - In Jan 2009 petrol was approximately 85p per litre
 - Petrol prices increased to 145p per litre by March 2012 (an increase of 71%)
 - Petrol prices fell slowly until mid-2014 when they fell more quickly reaching 115p at end of 2014 (a fall of 21% from the March 2012 peak).

[1]–[3] Marks for narrative comparison of the trends

[4]–[5] Marks for detailed comparison of trends with appropriate manipulation of data

[5]

(b) The source highlights 3 reasons why UK petrol prices have not fallen by as much as world oil prices since 2012.

- Lack of competition in petrol retailing means that retailers can keep petrol prices high even when costs are falling
- Pound has fallen against the dollar by about 12%, therefore, while the dollar price of oil has fallen significantly, the fall in the sterling price of oil has been much reduced
- High indirect tax on petrol in UK means that oil accounts for only around 40% of the price of petrol – the 58p per litre specific duty on petrol will be unchanged even if the VAT element falls.

Level 1 ([1]–[2])

A basic response provides an answer that demonstrates:

- Basic knowledge and understanding of relevant terminology, concepts, principles and models.
- Basic application of relevant economic principles, terminology, concepts and models to the context of the question; limited use of relevant data and/or diagrams, to address the issues in the question.
- Basic analysis; may lack focus.
- A low quality of written communication.

Level 2 ([3]–[4])

A good response provides an answer that demonstrates:

- Good knowledge and understanding of relevant terminology, concepts, principles and models.
- Good application of relevant economic principles, terminology, concepts and models to the context of the question; where relevant, data and/or

- diagrams are used reasonably to address the issues in the question.
- Good analysis in relation to the impact on economic agents; analysis may not be developed fully or may have some inaccuracy at times.
- A good quality of written communication.

Level 3 ([5]–[6])

An excellent response provides an answer that demonstrates:

- Excellent accurate knowledge and understanding of relevant terminology, concepts, principles and models.
- Excellent application of relevant economic principles, terminology, concepts and models to the context of the question; where relevant, data and/or diagrams are used effectively to address the issues in the question.
- Well focused, relevant analysis used accurately and appropriately in relation to the impact on economic agents.
- An excellent quality of written communication. [6]

- (c) The source identifies a number of reasons why oil prices have fallen rapidly since 2012.

On the supply side:

- Increased production of shale oil in US – driven by previous high oil price
- Refusal of OPEC (particularly Saudi Arabia) to cut output

On the demand side:

- Slowing demand from China and Germany as their economies have faced reduced growth rates
- Some governments (for example, Indonesia) have cut subsidies for fuel consumption
- US drivers have switched to fuel efficient cars – again driven by previous high oil price

This reduced demand and increased supply have put downward pressure on prices.

Level 1 ([1]–[3])

A basic response provides an answer that demonstrates:

- Basic knowledge and understanding of relevant terminology, concepts, principles and models.
- Basic application of relevant economic principles, terminology, concepts and models to the context of the question; limited use of relevant data, and diagrams where relevant, to address the issues in the question.
- Basic analysis; may lack focus.
- A low quality of written communication.

Level 2 ([4]–[6])

A good response provides an answer that demonstrates:

- Good knowledge and understanding of relevant terminology, concepts, principles and models.
- Good application of relevant economic principles, terminology, concepts and models to the context of the question; where relevant, data and diagrams are used reasonably to address the issues in the question.
- Good analysis in relation to the impact on economic agents; analysis

- may not be developed fully or may have some inaccuracy at times.
- A good quality of written communication.

AVAILABLE
MARKS

Level 3 ([7]–[9])

An excellent response provides an answer that demonstrates:

- Excellent accurate knowledge and understanding of relevant terminology, concepts, principles and models.
- Excellent application of relevant economic principles, terminology, concepts and models to the context of the question; where relevant, data and diagrams are used effectively to address the issues in the question.
- Excellent, relevant analysis used accurately and appropriately in relation to the impact on economic agents.
- An excellent quality of written communication. [9]

9

(d) Answers may include:

- Recent falls in the price of oil have made North Sea oil production less profitable (and indeed unprofitable for some). Reducing the tax burden should help these struggling companies to stay afloat.
- Reducing tax burden will stimulate investment in North Sea oil and therefore shift the PPF to the right
- Tax cut could actually lead to an increase in oil revenues in the future
 - Reference to Laffer curve effects of tax changes
- Reducing tax should help secure thousands of highly paid jobs which are directly and indirectly linked to North Sea oil production.
- Tax cut should improve the UK's energy security and make it less dependent on imported oil.
- The additional tax on North Sea oil production was introduced to ensure that the whole nation benefited from North Sea oil – not just a few private companies. Reducing this tax will reduce the impact of North Sea oil on ordinary UK citizens.
- Tax cut will cost the UK economy £1.3bn in lost tax revenue
- Reference to that impact of the tax cut on the government's deficit reduction plans
- Opportunity cost of the tax cut
- Tax cut does nothing for those companies who are currently making a loss
- Tax cut may divert investment away from renewable energy production and hence lead to greater CO₂ emissions
- Appropriate examples
- Appropriate diagrams

Level 1 ([1]–[5])

A basic response provides an answer that demonstrates:

- Basic knowledge and understanding of relevant terminology, concepts, principles and models.
- Basic application of relevant economic principles, terminology, concepts, and models to the context of the question. Some limited use of data, and diagrams where relevant, in relation to the context of the question.
- Basic analysis; analysis may lack focus.
- Judgement(s) unsupported.
- A low quality of written communication.

Level 2 ([6]–[10])

A good response provides an answer that demonstrates:

- Good knowledge and understanding of relevant terminology, concepts, principles and models.
- Good application of relevant economic principles, terminology, concepts, and models to the context of the question; where relevant, some reasonable use of data and diagrams in relation to the context of the question.
- Good analysis in relation to the impact on economic agents; analysis may not be developed fully or may have inaccuracies at times.
- Reasonable judgement(s) building on analysis.
- A good quality of written communication.

Level 3 ([11]–[15])

An excellent response provides an answer that demonstrates:

- Excellent accurate knowledge and understanding of relevant terminology, concepts, principles and models.
- Excellent application of relevant economic principles, terminology, concepts and models to the context of the question; where relevant, data and diagrams are used effectively to address the issues in the question.
- Well focused, relevant analysis used accurately and appropriately in relation to the impact on economic agents.
- Informed judgements that directly address the issues in the question and reach clear conclusions built on analysis.
- An excellent quality of written communication. [15]

Section B

**AVAILABLE
MARKS**

35

7 Answers may include:

- National pay scales hinder the efficient reallocation of resources through the market mechanism.
- National pay scales cause excess demand in some areas and excess supply in others
- National pay scales make a job such as teaching much more attractive in a low cost of living area such as NI, than the same job in a high cost of living area such as London. This therefore makes it difficult to recruit suitably qualified teachers in London and at the same time leaves a glut of qualified teachers searching for jobs in NI. (*In NI over 4000 recently qualified teachers are unemployed and places in teacher training colleges are massively oversubscribed*).
- National pay scales are unfair since workers in low cost of living areas enjoy a higher standard of living than similar workers in high cost of living areas.
- Regional pay could lead to a brain drain from poorer areas
- Regional pay could widen the gap between wages in the richest and poorest areas.
- It is unfair to pay people in different regions different salaries for doing the exact same job.
- Regional pay could actually increase the total public sector wage bill as wages are likely to increase faster in higher cost of living areas that wages are likely to fall in low cost of living areas.
- References to efficiency or otherwise of national pay scales
- Reference to impact of national public sector pay scales on private sector employment patterns
- Difficulty in measuring accurately regional cost of living
- Reference to likely impact of lower real wages on already depressed areas
- Reference to impact of regional pay scales on quality of staff recruited in poorer areas
- Reference to difficulty in implementing regional pay – worker and union resistance
- Appropriate examples
- Appropriate diagrams

Level 1 ([1]–[7])

A basic response provides an answer that demonstrates:

- Basic knowledge and understanding of relevant terminology, concepts, principles and models.
- Basic application of relevant economic principles, terminology, concepts, and models to the context of the question; some limited use of data, and diagrams where relevant, in relation to the context of the question.
- Basic analysis; analysis may lack focus.
- Judgement(s) unsupported.
- A low quality of written communication.

Level 2 ([8]–[14])

A good response provides an answer that demonstrates:

- Good knowledge and understanding of relevant terminology, concepts, principles and models.
- Good application of relevant economic principles, terminology, concepts, and models to the context of the question; some reasonable use of data, and diagrams where relevant, in relation to the context of the question.

- Good analysis in relation to the impact on economic agents; analysis may not be developed fully or may have inaccuracies at times.
- Reasonable judgement(s) building on analysis.
- A good quality of written communication.

Level 3 ([15]–[20])

An excellent response provides an answer that demonstrates:

- Excellent accurate knowledge and understanding of relevant terminology, concepts, principles and models.
- Excellent application of relevant economic principles, terminology, concepts and models to the context of the question; where relevant, data and diagrams are used effectively to address the issues in the question.
- Well focused, relevant analysis used accurately and appropriately in relation to the impact on economic agents.
- Informed judgements that directly address the issues in the question and reach clear conclusions built on analysis.
- An excellent quality of written communication. [20]

**AVAILABLE
MARKS**

20

8 Answers may include:

- The NHS provides health care free at the point of use. Access to care is based on clinical need and not on the ability to pay.
- Reference to health care as a merit good and the need for government intervention
- In recent years, advances in technology and treatments, and an ageing population have placed increasing demands on an already overstretched budget.
- Reference to scarcity and choice: The limited NHS budget has meant that the National Institute for Clinical Excellence (NICE) has had to deny patients' access to some treatments on the basis that they do not represent value for money in terms of quality life years.
- The increasing cost to taxpayer of NHS (£108bn in 2015 and £230bn by 2030)
- Potential for inequality in health provision if provided solely by the market
- Reference to inefficiency in the NHS
- Reference to market failure and government failure
- Comparison of the quality of health care provision with other countries, e.g. USA or France
- Reference to different methods of funding – increased taxation, introduction of user charges, subsidised private health insurance etc.
- Appropriate diagrams
- Appropriate examples

Level 1 ([1]–[7])

A basic response provides an answer that demonstrates:

- Basic knowledge and understanding of relevant terminology, concepts, principles and models.
- Basic application of relevant economic principles, terminology, concepts, and models to the context of the question; some limited use of data, and diagrams where relevant, in relation to the context of the question.
- Basic analysis; analysis may lack focus.
- Judgement(s) unsupported.
- A low quality of written communication.

Level 2 ([8]–[14])

A good response provides an answer that demonstrates:

- Good knowledge and understanding of relevant terminology, concepts, principles and models.
- Good application of relevant economic principles, terminology, concepts, and models to the context of the question; some reasonable use of data, and diagrams where relevant, in relation to the context of the question.
- Good analysis in relation to the impact on economic agents; analysis may not be developed fully or may have inaccuracies at times.
- Reasonable judgement(s) building on analysis.
- A good quality of written communication.

Level 3 ([15]–[20])

An excellent response provides an answer that demonstrates:

- Excellent accurate knowledge and understanding of relevant terminology, concepts, principles and models.
- Excellent application of relevant economic principles, terminology, concepts

and models to the context of the question; where relevant, data and diagrams are used effectively to address the issues in the question.

- Well focused, relevant analysis used accurately and appropriately in relation to the impact on economic agents.
- Informed judgements that directly address the issues in the question and reach clear conclusions built on analysis.
- An excellent quality of written communication.

[20]

Section C

Total

**AVAILABLE
MARKS**

20

80