



Rewarding Learning

**ADVANCED SUBSIDIARY (AS)
General Certificate of Education
2025**

Economics

Assessment Unit AS 1

assessing

Markets and Market Failure

[SEC11]

MONDAY 12 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.

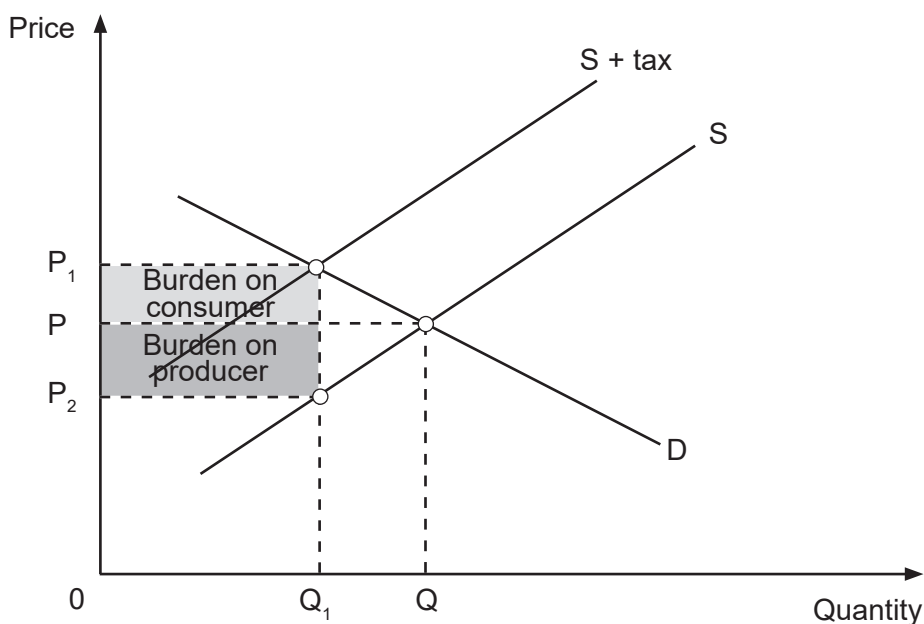
Section A

| | | AVAILABLE MARKS |
|--|-----|-----------------|
| <p>1 Capital goods are fixed assets which are used in the productive process in order to produce finished ‘consumer’ goods or other capital goods. Consumer goods on the other hand are items which satisfy wants and needs directly and are ready for final consumption. When a golf course uses a robotic lawnmower it is a capital good as it is being used to provide a service of a golf course. However, when a private individual uses a robotic lawnmower to cut their lawn it is a consumer good.</p> <p>For clear explanation of difference between capital and consumer good [2] For appropriate examples in each case [2]</p> | [4] | 4 |
| <p>2 Marginal utility refers to the extra satisfaction gained from consuming an additional unit of a good. Whereas total utility refers to the total satisfaction a consumer gains from consuming a given quantity of a good. The marginal utility of the 4th slice of cake is –5 utils, whereas the total utility gained from consuming 4 slices of cake is 85 utils (50 + 30 + 10 – 5)</p> <p>For clear explanation of difference between marginal utility and total utility [2] For appropriate calculation in each case [2]</p> | [4] | 4 |
| <p>3 Economic rent is equal to the area under the equilibrium wage rate and above the labour supply curve. In the case of the fast-food labour market the total hourly economic rent is equal to £4.8 million. ($£8 \times 1.2 \text{ million jobs}/2$)</p> <p>For calculation of economic rent as £4.8 million [3] Up to [2] for correct methodology but error in calculation or presentation</p> | [3] | 3 |
| <p>4 (a) A normal good is a good with a positive income elasticity of demand. In other words, an increase in income will lead to an increase in demand. From the data we can see that both wine and craft beer are normal goods. A luxury good is a good where an increase in income leads to a more than proportional increase in demand. In other words, a good with an income elasticity of demand value which is positive and greater than one. From the data we can see that craft beer is a luxury good.</p> <p>For clear explanation of difference between a normal good and a luxury good [2] For appropriate examples in each case [2]</p> | [4] | |
| <p>(b) (i) A 10% increase in the price of craft beer will be likely to cause sales of craft beer to fall by 7.6% ($-0.76 \times 10\%$).</p> <p>For calculation of change in craft beer sales as –7.6% [2] Award [1] for correct methodology but error in calculation or presentation in each case.</p> | [2] | |

- (ii) A 10% increase in the price of craft beer will be likely to cause sales of wine to increase by 12.5% ($1.25 \times 10\%$).

For calculation of change in wine sales as +12.5% [2]
Award [1] for correct methodology but error in calculation or presentation in each case. [2]

- (c) According to the data the PED for wine is -1.36 making the demand for wine relatively price elastic. An indirect tax will shift the supply curve to the left from S to $S + \text{tax}$. The relative price elasticity of demand means that all other things being equal the burden of this indirect tax is likely to fall mainly on the producer. This is shown on the diagram below.



Issues and areas for analysis include:

- Explanation of PED
- Reference to shifting supply curve
- Distinction between a specific or ad valorem tax
- Explanation that the producer is likely to pay the larger part of the tax
- Appropriate examples
- Appropriate diagram

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 where relevant, 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

- 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 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]

**AVAILABLE
MARKS**

14

Section A

25

Section B

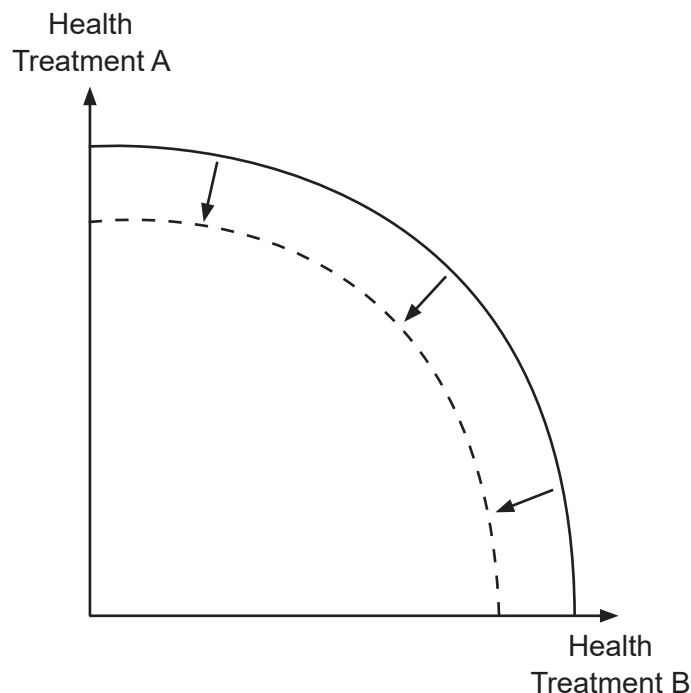
AVAILABLE
MARKS

- 5 (a)
- The UK spends less on health per capita than all other countries in the table except Belgium
 - The UK spends less on health per capita than the average of the other countries
 - UK spends approximately 79% of the average of the other countries
 - The UK spends less than half (approx. 44%) of the highest spender, the USA
 - The UK spends approx. 73% of the second highest spender, Germany
 - The UK spends approx. 2% more than the lowest spender in the table, Belgium

Up to [2] for narrative comparison of UK spending on health care compared to the other countries

Up to [3] for appropriate use of data [5]

- (b) The source indicates that the lack of investment in health since 2011 has left the UK with fewer hospital beds, fewer CT scanners and fewer MRI scanners than almost any developed nation. At the same time the lack of investment in staff and pay has led to the resignation of 15 000 nurses in 2022 and left the NHS with 133 000 unfilled positions. This lack of investment has reduced both the quantity and quality of the physical and human resources available to the NHS and therefore will reduce its productive capacity. This can be illustrated by an inward shift of the NHS' production possibility frontier.



Issues and areas for analysis include:

- Definition/explanation of a PPF
- Explanation of how a lack of investment in physical infrastructure causes a reduction in the quantity and quality of physical resources
- Explanation of how a lack of investment in staff training and pay causes a reduction in the quantity and quality of human resources
- Explanation of how a reduction in the quantity and quality of resources causes the PPF to shift to the left
- Appropriate examples
- Appropriate diagrams

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 where relevant, 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 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])

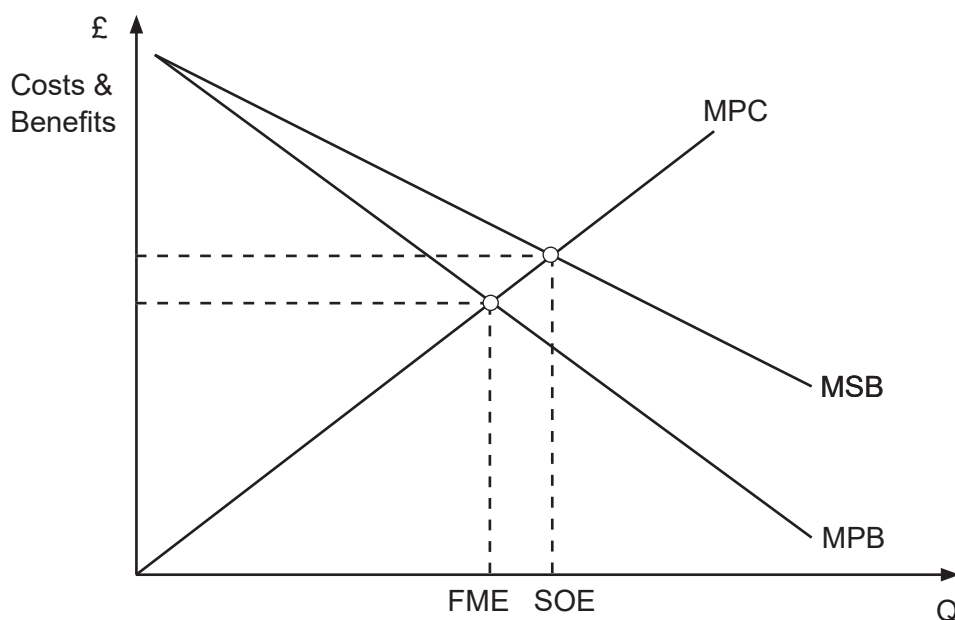
An excellent response provides an answer that demonstrates:

- 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 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) Health care is considered by many economists to be an example of a merit good. The consumption of health care by one economic agent may confer positive externalities on society and therefore health care would be underconsumed if left to the free market.

This is illustrated on the diagram below where the Marginal Social Benefit of consumption (MSB) is higher than the Marginal Private Benefit (MPB). This results in the Free Market Equilibrium (FME) being lower than the Socially Optimal Equilibrium (SOE).



Alternatively merit goods may be underconsumed due to a lack of information on behalf of consumers regarding the benefits of consuming health care.

Issues and areas for analysis include:

- Definition/explanation of market failure
- Definition/explanation of merit goods
- Discussion of positive externalities associated with health care
- Discussion of information failure
- Distinction between MPB and MSB
- Appropriate diagrams
- Appropriate examples

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.

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]

(d) The source identifies a number of ways the UK government could improve the quality of health care in the UK.

- The government could increase taxation to pay for increased funding. This may involve increases to income tax or national insurance which could be ringfenced for the NHS.
- Alternatively, it could involve an increase in so-called sin taxes on items such as cigarettes, alcohol, and unhealthy foods. Again, the revenue raised could be ringfenced to pay for the increased health costs associated with these products.
- The government could introduce a range of user charges for example flat rate fees for GP visits or routine hospital visits. This would provide an alternative revenue stream and might also reduce demand for unnecessary GP visits and treatments and so save the NHS some money which can be allocated to more pressing needs.
- The government could provide tax breaks to encourage people to take out private health care insurance. This would reduce the demand on NHS services and so allow the NHS to improve the service it provides.
- The government could review the range of services that the NHS provides to reduce the number of non-essential services and ensure the NHS has enough resources to provide basic and emergency care.
- The government could deny treatments to those who live unhealthy lifestyles. This would leave more money available to treat those who are ill through no fault of their own and could provide a nudge or an incentive for those who lead unhealthy lifestyles to change their behaviour.
- Finally, the government could privatise the NHS and open it up to free market forces. David Strathearn argues that government provision of health care in the UK has removed the profit motive and has led to a bureaucratic and wasteful service.

Issues, analysis and areas for discussion include:

- Reference to increasing tax as a method of increasing funding available to NHS
- Reference to introducing or increasing NHS user charges
- Reference to introduction of tax breaks to encourage people to take

- private health insurance
- Reference to the denial of health services to those who lead unhealthy lifestyles
- Reference to alternative policies the government could use to increase funding for the NHS – yearly subscription fees, compulsory health insurance schemes etc.
- Reference to the lack of a profit motive and the price mechanism in the NHS and the impact on efficiency
- The cost to taxpayer of NHS
- Potential for inequality in health provision if provided by the market
- Reference to market failure and government failure
- Comparison of the cost and quality of health care provision under different systems in other countries, e.g. USA or France
- Appropriate diagrams
- Appropriate examples

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 and evaluation; however, this 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 and evaluation in relation to the impact on economic agents; however, this 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 and evaluation 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]

35

Section B

35

**AVAILABLE
MARKS**

Section C

AVAILABLE
MARKS

- 6 Those who argue that disposable vapes should be banned argue that they are primarily marketed to teenagers with their bright colours and fruit flavours. They argue that vaping is having a detrimental impact on the health of young people as it is leading to nicotine addiction and health problems associated with inhaling chemicals into the lungs. They argue that current regulation whereby it is illegal to sell vapes to under 18s is failing, and stronger action needs to be taken.

Those who oppose banning disposable vapes argue that they are a useful smoking cessation device and if regulated properly they can play a part in reducing the damage associated with smoking.

Issues, analysis and areas for discussion include:

- Vapes harm the individuals that use them because of their addictive nature, and the fact that they are used primarily by children, individuals are not necessarily the best judges of their own interests. Therefore the government has a duty to protect people, even from themselves
- Disposable vapes creates significant negative externalities in terms of health, educational outcomes, and pollution. Therefore, prohibition is necessary to reduce use and reduce these negative externalities
- Reference to the signal that prohibition would send to potential users
- Reference to whether governments have the right to tell people what they can and can't do, if the act does not harm anyone else
- Reference to the effectiveness of prohibition in other cases - Banning drugs has not worked, would banning vapes be any more successful?
- Reference to the costs of enforcing a ban. This money could be better spent on educating about the dangers of vaping
- Reference to alternative methods of reducing vape use – for example taxing disposable vapes in line with cigarettes which would raise revenue for the government
- Reference to demerit goods and negative consumption externalities
- Reference to the negative production externalities associated with disposable vapes – most end up in land fill despite containing lithium batteries and a range of pollutants
- 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 and evaluation; however this 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 and evaluation used accurately and appropriately in relation to the impact on economic agents.
- 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 and evaluation 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]

20

- 7 Free market economists argue that governments should not be worried about rising levels of income and wealth inequality.

They argue that in a free-market income and wealth will filter down to the poor naturally, through the working of the market economy. They argue that government action to redistribute income and wealth reduces the incentive to work for both the rich and the poor and is therefore counterproductive. They point to the very high tax rates imposed by the UK government in the 1960's and 70's, which led to tax exiles in the UK. They also argue that rational people are only concerned with their absolute income and are not concerned with relative income.

However, other economists would argue that the government should be worried about rising levels of income and wealth inequality in the UK. They argue that there is a strong correlation between inequality rates and social problems such as poor health, depression, and crime levels. They also argue that redistribution benefits the whole of society, since the poor will spend all their additional income, which will benefit the economy and create further jobs. They also argue that redistribution will increase total utility in an economy since the marginal utility the poor receive from each extra pound is greater than the loss of utility the rich suffer from giving up an extra pound. Finally, they argue that humans are not always rational and that we are biologically programmed to compare ourselves to others and hence we are as much concerned with our relative income and wealth as we are with our absolute income and wealth.

Issues, analysis and areas for discussion include:

- Distinction between income and wealth
- Distinction between absolute and relative poverty
- Reference to arguments for government intervention to reduce inequality
 - Link between inequality and wider social issues
 - External cost of inequality
 - Reference to how redistribution can create economic growth

- Reference to the impact of redistribution on utility levels
- Reference to arguments against government intervention to reduce inequality
 - Reference to filter down theory
 - Reference to rational agents being concerned with absolute outcomes rather than relative outcomes
 - Negative impact of redistribution on incentives
- Reference to the costs and benefits of alternative policies for redistribution
- 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 and evaluation; however this 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 and evaluation used accurately and appropriately in relation to the impact on economic agents.
- 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 and evaluation 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

20

80