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A-level  
**ECONOMICS**  
**7136/1**

PAPER 1 Markets and Market Failure

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Mark scheme

June 2020

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Version: 1.0 Final Mark Scheme

\*206A7136/1/MS\*

Mark schemes are prepared by the Lead Assessment Writer and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all associates participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the students' responses to questions and that every associate understands and applies it in the same correct way. As preparation for standardisation each associate analyses a number of students' scripts. Alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, associates encounter unusual answers which have not been raised they are required to refer these to the Lead Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of students' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

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## Level of response marking instructions

Level of response mark schemes are broken down into levels, each of which has a descriptor. The descriptor for the level shows the average performance for the level. There are marks in each level.

Before you apply the mark scheme to a student's answer read through the answer and annotate it (as instructed) to show the qualities that are being looked for. You can then apply the mark scheme.

### Step 1 Determine a level

Start at the lowest level of the mark scheme and use it as a ladder to see whether the answer meets the descriptor for that level. The descriptor for the level indicates the different qualities that might be seen in the student's answer for that level. If it meets the lowest level then go to the next one and decide if it meets this level, and so on, until you have a match between the level descriptor and the answer. With practice and familiarity you will find that for better answers you will be able to quickly skip through the lower levels of the mark scheme.

When assigning a level you should look at the overall quality of the answer and not look to pick holes in small and specific parts of the answer where the student has not performed quite as well as the rest. If the answer covers different aspects of different levels of the mark scheme you should use a best fit approach for defining the level and then use the variability of the response to help decide the mark within the level, ie if the response is predominantly level 3 with a small amount of level 4 material it would be placed in level 3 but be awarded a mark near the top of the level because of the level 4 content.

### Step 2 Determine a mark

Once you have assigned a level you need to decide on the mark. The descriptors on how to allocate marks can help with this. The exemplar materials used during standardisation will help. There will be an answer in the standardising materials which will correspond with each level of the mark scheme. This answer will have been awarded a mark by the Lead Examiner. You can compare the student's answer with the example to determine if it is the same standard, better or worse than the example. You can then use this to allocate a mark for the answer based on the Lead Examiner's mark on the example.

You may well need to read back through the answer as you apply the mark scheme to clarify points and assure yourself that the level and the mark are appropriate.

Indicative content in the mark scheme is provided as a guide for examiners. It is not intended to be exhaustive and you must credit other valid points. Students do not have to cover all of the points mentioned in the Indicative content to reach the highest level of the mark scheme.

An answer which contains nothing of relevance to the question must be awarded no marks.

Below is the levels of response marking grid to be used when marking any 25 mark question.

Level of response	Response	Max 25 marks
5	<p><b>Sound, focused analysis and well-supported evaluation that:</b></p> <ul style="list-style-type: none"> <li>• is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors</li> <li>• includes good application of relevant economic principles to the given context and, where appropriate, good use of data to support the response</li> <li>• includes well-focused analysis with clear, logical chains of reasoning</li> <li>• includes supported evaluation throughout the response and in a final conclusion.</li> </ul>	21–25 marks
4	<p><b>Sound, focused analysis and some supported evaluation that:</b></p> <ul style="list-style-type: none"> <li>• is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors</li> <li>• includes some good application of relevant economic principles to the given context and, where appropriate, some good use of data to support the response</li> <li>• includes some well-focused analysis with clear, logical chains of reasoning</li> <li>• includes some reasonable, supported evaluation.</li> </ul>	16–20 marks
3	<p><b>Some reasonable analysis but generally unsupported evaluation that:</b></p> <ul style="list-style-type: none"> <li>• focuses on issues that are relevant to the question, showing satisfactory knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present</li> <li>• includes reasonable application of relevant economic principles to the given context and, where appropriate, some use of data to support the response</li> <li>• includes some reasonable analysis but which might not be adequately developed or becomes confused in places</li> <li>• includes fairly superficial evaluation; there is likely to be some attempt to make relevant judgements but these aren't well-supported by arguments and/or data.</li> </ul>	11–15 marks
2	<p><b>A fairly weak response with some understanding that:</b></p> <ul style="list-style-type: none"> <li>• includes some limited knowledge and understanding of economic terminology, concepts and principles is shown but some errors are likely</li> <li>• includes some limited application of relevant economic principles to the given context and/or data to the question</li> <li>• includes some limited analysis but it may lack focus and/or become confused</li> <li>• includes some evaluation which is weak and unsupported.</li> </ul>	6–10 marks
1	<p><b>A very weak response that:</b></p> <ul style="list-style-type: none"> <li>• includes little relevant knowledge and understanding of economic terminology, concepts and principles</li> <li>• includes application to the given context which is, at best, very weak</li> <li>• includes attempted analysis which is weak and unsupported.</li> </ul>	1–5 marks

**Context 1**

**Total for this context: 40 marks**

**0 | 1**

Using the data in **Extract A** (Figure 1) calculate the percentage of all plastics produced in the period 1950–2015 which have either been sent to landfill or incinerated. Give your answer to **one** decimal place.

**[2 marks]**

Calculation:  $4600\text{m} + 700\text{m} + 300\text{m} + 100\text{m} = 5700\text{m tonnes}$

$5700\text{m} / 8300\text{m} \times 100\% = 68.674699\%$

Correct answer is 68.7%

<b>Response:</b>	<b>Marks</b>
For the correct answer, to one decimal place, with % sign	<b>2 marks</b>
For the correct answer but without the % sign and/or not to one decimal place <b>OR</b> For the correct method, but the wrong answer, to one decimal place, with the % sign	<b>1 mark</b>

**MAXIMUM FOR QUESTION 01: 2 MARKS**

**0 2**

*Explain how the data in **Extract A** (Figure 2) show that higher living standards lead to greater volumes of waste per capita being produced.*

**[4 marks]**

<b>Response:</b>	<b>Marks</b>
<ul style="list-style-type: none"> <li>includes evidence that shows that higher living standards lead to greater volumes of waste being produced</li> <li>clearly explains how this data is evidence that higher living standards lead to greater volumes of waste being produced</li> </ul>	<b>4 marks</b>
<ul style="list-style-type: none"> <li>includes evidence that shows that higher living standards lead to greater volumes of waste being produced</li> <li>explanation of how this data is evidence that higher living standards lead to greater volumes of waste being produced</li> </ul>	<b>3 marks</b>
<ul style="list-style-type: none"> <li>includes some evidence that shows that higher living standards lead to greater volumes of waste being produced</li> <li>limited explanation of how this data is evidence that higher living standards lead to greater volumes of waste being produced</li> </ul>	<b>2 marks</b>
<ul style="list-style-type: none"> <li>includes evidence that does not clearly show that higher living standards lead to greater volumes of waste being produced</li> <li>no explanation of how this data is evidence that higher living standards lead to greater volumes of waste being produced</li> </ul>	<b>1 mark</b>

**Relevant issues include:**

- explanation of why GDP per capita might be used as a measure of living standards
- explanation of what is meant by waste generation and why it might be greater in countries with higher GDP per capita
- the data in Figure 2 show a positive correlation between GDP per capita/living standards and waste generation, for example, Luxembourg has the highest GDP per capita at \$111 000 and one of the highest amounts of waste generation at 620kg per year per capita
- a line of best fit through these data would be upward sloping, indicating that higher living standards generally result in more waste being produced
- the USA has a higher GDP per capita at \$52 000 than the UK at \$43 000, and generates more waste per capita, with 810kg per year per capita, compared to the UK's 500kg per year per capita
- Ethiopia has the lowest level of GDP per capita at \$1000, and the lowest level of waste generation at 80kg per year per capita.

**MAXIMUM FOR QUESTION 02: 4 MARKS**

**0 3**

**Extract B** (lines 8–10) states: ‘many companies intentionally make it difficult to repair their products in order to increase sales. This is both economically inefficient and environmentally foolish; it imposes costs on the environment even though it may make sense for individual companies.’

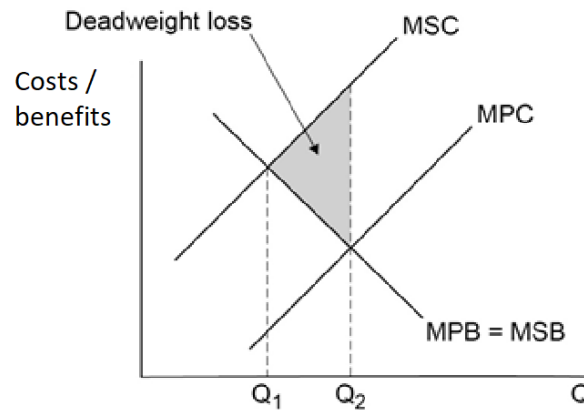
With the help of a diagram, explain how the production of goods which are designed not to last long may result in market failure.

**[9 marks]**

Level of response	Response:	Max 9 marks
3	<ul style="list-style-type: none"> <li>• is well organised and develops one or more of the key issues that are relevant to the question</li> <li>• shows sound knowledge and understanding of relevant economic terminology, concepts and principles</li> <li>• includes good application of relevant economic principles and/or good use of data to support the response</li> <li>• includes well-focused analysis with a clear, logical chain of reasoning</li> <li>• includes a relevant diagram that will, at the top of this level, be accurate and used appropriately</li> </ul>	7–9 marks
2	<ul style="list-style-type: none"> <li>• includes one or more issues that are relevant to the question</li> <li>• shows reasonable knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present</li> <li>• includes reasonable application of relevant economic principles and/or data to the question</li> <li>• includes some reasonable analysis but it might not be adequately developed and may be confused in places</li> <li>• may include a relevant diagram</li> </ul>	4–6 marks
1	<ul style="list-style-type: none"> <li>• is very brief and/or lacks coherence</li> <li>• shows some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely</li> <li>• demonstrates very limited ability to apply relevant economic principles and/or data to the question</li> <li>• may include some very limited analysis but the analysis lacks focus and/or becomes confused</li> <li>• may include a relevant diagram but the diagram is not used and/or is inaccurate in some respects.</li> </ul>	1–3 marks

**Suggested diagram**

An MSC/MSB externality diagram is expected, showing overproduction as a result of a negative externality in production. However, a demand and supply diagram illustrating overproduction resulting from a negative externality is also acceptable.



**An externality diagram showing negative consumption externalities is also acceptable. The written response should relate appropriately to the chosen diagram.**

**Relevant issues include:**

- definition of market failure
- explanation of diagram, showing over-production of goods due to the marginal external costs creating a divergence between marginal social cost and marginal private cost. The over-production of goods creates a deadweight loss
- explanation of why output in a free market will be where  $MPC=MPB$ , whereas the socially optimal output is where  $MSC=MSB$
- explanation of economic (in)efficiency
- explanation of how firms have an incentive to make products short-lived, as such products are likely to be made with cheaper raw materials, less quality control and perhaps cheaper labour
- how designing products to fail may result in more sales in the future
- how the actions of producers are normally not constrained by any requirements to consider how products are disposed of at the end of their useful life
- how disposal of waste products via landfill or incineration imposes externalities on third parties
- analysis of what such externality impacts are and who pays for them
- how the rapid utilisation of scarce resources such as minerals, water, oil, accelerates the degradation of the environment and reduces the quantity available for the future
- how such environmental problems might be considered allocatively inefficient
- reference to extracts, including the fact that not only producers, but also transport companies and others benefit from the overproduction of goods.

**MAXIMUM FOR QUESTION 03: 9 MARKS**

**0 4**

**Extract C** (lines 17–19) states: ‘Many environmental economists suggest that making firms pay for the costs of landfill associated with their products, or taxing raw material inputs, will be necessary to ensure a sustainable future for all.’

Using the extracts and your knowledge of economics, evaluate policies, if any, that governments in developed countries should pursue to reduce waste and encourage the recycling of waste products.

**[25 marks]**

**Areas for discussion include:**

- explanation of market forces and government intervention
- acknowledgement of recent rapid growth in the supply of waste
- discussion of the global market for waste, with waste from the rich world being shipped to parts of the developing world, where lower-cost labour makes sorting cost-effective and there is greater demand for second-hand materials
- discussion of how the ‘collect, sort, export’ model has been threatened by China’s decision to effectively ban imports of some types of waste’
- explanation of how rich countries, by moving away from manufacturing and into service sectors, have effectively outsourced production to developing countries, thus exporting some of the environmental problems too
- explanation of the ‘circular economy’ and how it differs from the current market model of supply and demand
- how there are economic benefits to circularity as well as costs (eg job creation)
- discussion of possible policies at the national level
  - regulations
  - taxation of raw material inputs
  - subsidies
  - permits and quotas
  - forcing producers to pay for disposal of products
- discussion of problems with the above policies, including feasibility, effectiveness and cost
- the likely uneven impact across different sectors of introducing policies to promote circularity
- explanation of how international agreement may be necessary given the global nature of the problem and discussion of how such international agreements are slow to achieve and often fail to address problems identified
- discussion of EU targets for national governments to improve their recovery rates
- how the market may respond to lower waste prices via rationing, signalling and incentive effects: for example, automation may replace human sorters at waste plants, and online markets for second-hand raw materials may develop
- market failure arguments
- government failure arguments.

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the student’s response to the question.

**Use the level mark scheme on page 4 to award students marks for this question.**

**MAXIMUM FOR QUESTION 04: 25 MARKS**

**Context 2**

**Total for this context: 40 marks**

**0 | 5**

Using the data in **Extract D** (Figure 3), calculate how much the median care worker earns for every pound earned by the median worker in the whole economy. Give your answer to the nearest penny.

**[2 marks]**

Calculation:  $7.50/12.23 = 0.613246\dots$

Correct answer is 61p

<b>Response</b>	<b>Max 2 marks</b>
For the correct answer, to the nearest penny, with units	<b>2 marks</b>
For the correct answer but not rounded to the nearest penny, <b>and/or</b> without units <b>OR</b> For the correct method, but the wrong answer, to the nearest penny, with units	<b>1 mark</b>

**MAXIMUM FOR QUESTION 05: 2 MARKS**

**0 6**

*Explain how the data in **Extract D** (Figure 4) show that there is likely to be substantial upward pressure on the wages of care workers by 2041.*

**[4 marks]**

<b>Response</b>	<b>Max 4 marks</b>
<ul style="list-style-type: none"> <li>• includes evidence that there is likely to be substantial upward pressure on the wages of care workers by 2041</li> <li>• clearly explains how this data is evidence that there is likely to be substantial upward pressure on the wages of care workers by 2041</li> </ul>	<b>4 marks</b>
<ul style="list-style-type: none"> <li>• includes evidence that there is likely to be substantial upward pressure on the wages of care workers by 2041</li> <li>• explanation of how this data is evidence that there is likely to be substantial upward pressure on the wages of care workers by 2041</li> </ul>	<b>3 marks</b>
<ul style="list-style-type: none"> <li>• includes some evidence that there is likely to be substantial upward pressure on the wages of care workers by 2041</li> <li>• limited explanation of how this data is evidence that there is likely to be substantial upward pressure on the wages of care workers by 2041</li> </ul>	<b>2 marks</b>
<ul style="list-style-type: none"> <li>• includes evidence that does not clearly show that there is likely to be substantial upward pressure on the wages of care workers by 2041</li> <li>• no explanation of how this data is evidence that there is likely to be substantial upward pressure on the wages of care workers by 2041.</li> </ul>	<b>1 mark</b>

**Relevant issues include:**

- the data show that the UK population is expected to grow by 2041 from 65 648 000 to 72 905 000, by 11%, but the growth in the population is very uneven
- the size of the elderly population is set to grow from 10 250 000 to 14 545 000, by 41.9% (65–84 year-olds), from 1 436 000 to 2 887 000, 101% (85–94) and from 128 000 to 360 000, 181% (95+), but the size of the population of working age is only forecast to grow from 39 182 000 to 39 930 000, by 2.0% in the same period.
- the very elderly, 85+ and 95+, have more complex, acute and numerous care needs so require more care than the recently retired
- given the rapid growth in the elderly population, one would expect demand for care to rise rapidly, and thus the derived demand for care workers to also rise rapidly
- at the same time, the negligible growth in the working age population suggests that the supply of labour into the care sector is likely to grow slower than the demand for labour, so wages are likely to rise
- these two factors suggest excess demand for care workers at existing wage rates, and thus upward pressure on wages.

**MAXIMUM FOR QUESTION 06: 4 MARKS**

**0 7**

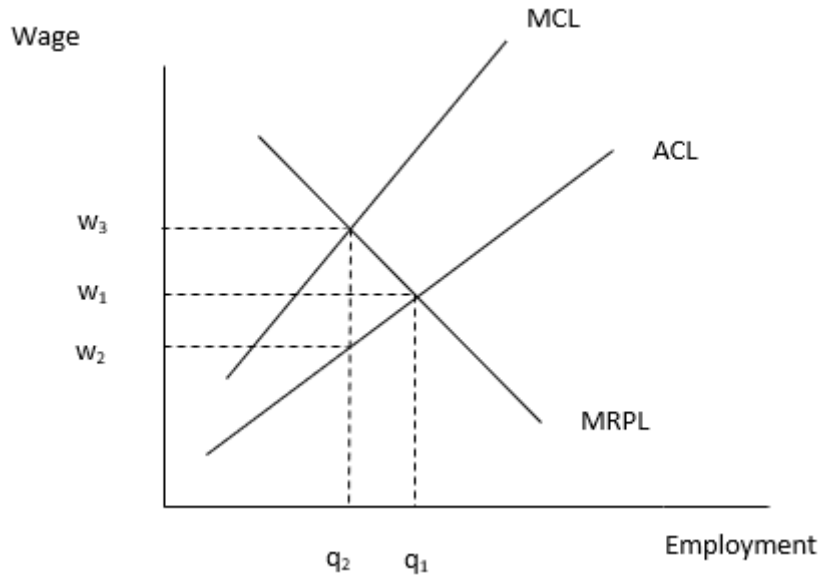
**Extract E** (lines 5–7) states: ‘Until the 1990s, almost all workers in the care sector were employed by the government, which acted as a monopsonist by keeping wages low.’

With the help of a diagram, explain how a monopsonistic public sector can lead to low pay for social care work.

**[9 marks]**

Level of response	Response:	Max 9 marks
3	<ul style="list-style-type: none"> <li>• is well organised and develops one or more of the key issues that are relevant to the question</li> <li>• shows sound knowledge and understanding of relevant economic terminology, concepts and principles</li> <li>• includes good application of relevant economic principles and/or good use of data to support the response</li> <li>• includes well-focused analysis with a clear, logical chain of reasoning</li> <li>• includes a relevant diagram that will, at the top of this level, be accurate and used appropriately</li> </ul>	7–9 marks
2	<ul style="list-style-type: none"> <li>• includes one or more issues that are relevant to the question</li> <li>• shows reasonable knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present</li> <li>• includes reasonable application of relevant economic principles and/or data to the question</li> <li>• includes some reasonable analysis but it might not be adequately developed and may be confused in places</li> <li>• may include a relevant diagram</li> </ul>	4–6 marks
1	<ul style="list-style-type: none"> <li>• is very brief and/or lacks coherence</li> <li>• shows some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely</li> <li>• demonstrates very limited ability to apply relevant economic principles and/or data to the question</li> <li>• may include some very limited analysis but the analysis lacks focus and/or becomes confused</li> <li>• may include a relevant diagram but the diagram is not used and/or is inaccurate in some respects.</li> </ul>	1–3 marks

A monopsonistic labour market diagram is expected, showing employment of  $q_2$  workers at a wage of  $w_2$ , below the perfectly competitive levels of employment and wage, and below the MRP of the workers who are employed.



**Relevant issues include:**

- explain what is meant by monopsony
- explanation of the diagram, showing an equilibrium level of employment below the competitive level, and a wage below the MRP of labour, and below the competitive market wage rate
- the outcomes in the labour market: low pay and low employment
- the nature of government's monopsony power in the care worker labour market prior to privatisation in the 1990s, arising from the fact that almost all care was in the public sector
- the nature of the monopsony power that currently exists in the care sector, as care homes bid competitively for care contracts from monopsonistic local authorities, thus receiving low revenues and being unable to afford higher wages to care workers
- in order to win care contracts, care homes may engage in a competitive tendering process with monopsonistic councils, giving them an incentive to offer a low price and that those firms who win contracts by offering a lower price will find that they have small budgets from which to pay staff
- how privatisation has affected low pay by exposing workers to monopsony labour market power combined with the profit motive of private-sector care homes.

**MAXIMUM FOR QUESTION 07: 9 MARKS**

**0 8**

**Extract F** (lines 1–3) states: ‘There are aspects of market failure in the social care sector, though some argue that inappropriate government intervention and a lack of funding are the main reasons why the system is failing to deliver high quality care.’

Using the extracts and your knowledge of economics, assess policies that might be used to improve the provision of social care in the UK.

**[25 marks]**

**Areas for discussion include:**

- trends in social care since privatisation in the 1990s and how privatisation may have led to lower pay, certainly compared to remaining state care providers
- rising pressures on the sector as a result of an ageing population with increasing care demands
- social care as a merit good and market failure arising from the external benefits of social care
- lack of funding from central government, restricting local government ability to pay for care
- low pay in the care sector, job insecurity and the fact that many are leaving the care sector for jobs in retail and supermarkets for better pay and conditions
- the lack of labour supply is threatening the sector, with high levels of job vacancies (38% of care homes understaffed, 6.6% of roles vacant)
- reports of inadequate care in some care homes and the link between low pay, low motivation and inadequate care
- bankruptcy of care home providers
- ineffective regulation by the Care Quality Commission/risk of regulatory capture
- market failure arising from the low incomes of many of those requiring care
- discussion of the lack of integration between the care sector and the NHS
- discussion of a range of policies to include
  - more generous government funding for local authorities
  - subsidies for private providers
  - nationalisation
  - hypothecated tax for care funding/additional taxation
  - a more generous National Living Wage to encourage labour supply
  - a less generous National Living Wage to ease the pressure on care home companies
  - more investment in training, career development, status, etc
  - promoting union membership
  - professionalisation of workforce to raise standards
  - relaxing immigration policy for care workers to ease recruitment problems
  - providing people in need of care with increased cash welfare benefits to help them purchase their own care
  - introduce a compulsory insurance system providing people with the ability to purchase their own care
- discussion of how the market is likely to develop in the absence of government intervention and whether the low pay of care workers is likely to be rectified by the market itself
- discussion of how care might improve if the private sector were to be given a greater role in the care market
- market failure arguments
- government failure arguments.

Use the level mark scheme on page 4 to award students marks for this question.

**MAXIMUM FOR QUESTION 08: 25 MARKS**

**Section B**

Below is the levels of response marking grid which should be used to mark the 15 mark questions

<b>Level of response</b>	<b>Response:</b>	<b>Max 9 marks</b>
<b>3</b>	<p><b>A good response provides an answer that:</b></p> <ul style="list-style-type: none"> <li>• is well organised and develops a selection of the key issues that are relevant to the question</li> <li>• shows sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors</li> <li>• includes good application of relevant economic principles to the given context and, where appropriate, good use of data to support the response</li> <li>• includes well-focused analysis with clear, logical chains of reasoning</li> </ul>	<b>11–15 marks</b>
<b>2</b>	<p><b>A reasonable response provides an answer that:</b></p> <ul style="list-style-type: none"> <li>• focuses on issues that are relevant to the question</li> <li>• shows satisfactory knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present</li> <li>• includes reasonable application of relevant economic principles to the given context and, where appropriate, some use of data to support the response</li> <li>• includes some reasonable analysis but which might not be adequately developed or becomes confused in places</li> </ul>	<b>6–10 marks</b>
<b>1</b>	<p><b>A weak response provides an answer that:</b></p> <ul style="list-style-type: none"> <li>• has identified one or more relevant issues</li> <li>• has some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely</li> <li>• has very limited application of relevant economic principles to the given context and/or data to the question</li> <li>• might have some limited analysis but it may lack focus and/or become confused.</li> </ul>	<b>1–5 marks</b>

**Section B****Essay 1****Total for this essay: 40 marks**

0	9
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*Explain how the imposition of a tax on a good or service affects both consumer surplus and producer surplus.*

**[15 marks]****Areas for discussion include:**

- definitions of tax, consumer surplus, producer surplus
- explanation of how tax raises the costs of production for producers, reducing their willingness to supply at any given price level
- how firms will usually look to pass on at least some of this higher tax to consumers in the form of higher prices
- alternatively, firms may respond to the higher tax by not raising prices much, instead paying the tax out of their profits, if indeed they make any such profits. Other firms may be forced out of business by the tax, thus limiting supply
- how the incidence of tax is determined by the price elasticity of demand for the good or service. When PED is low, the consumer surplus is affected more than the producer surplus. When PED is high, the opposite is true
- some of the lost consumer and producer surplus is likely to be transferred to the government via tax revenue. However, there is also likely to be some degree of deadweight loss as a result of the reduced economic activity brought about by the tax
- use of examples.

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the student's response to the question.

**Use the level mark scheme on page 15 to award students marks for this question.**

**MAXIMUM FOR QUESTION 09: 15 MARKS**

**1 0**

*Discuss whether governments should consider increasing the regulation and taxation of technology firms which have acquired significant global monopoly power.*

**[25 marks]**

**Areas for discussion include:**

- definition of monopoly power
- explanation of how new monopolies have achieved market dominance
- explanation of how firms with monopoly power can exploit their power to restrict output and raise prices
- discussion of how the nature of monopoly is changing, as the rich world's demands shift away from heavy industry and towards information economies
- how monopoly regulation has largely been designed for a different context from the modern internet firms, and is (to some extent) trying to catch up with the pace of change
- how breaking up firms may lead to more competition and better customer outcomes, but could jeopardise the economies of scale enjoyed by large dominant firms and their customers
- how a tax would be likely to work: an indirect tax; 'super tax' on abnormal profits
- recognition that many services offered by these firms are free to users, paid for by third-party advertising, hence price-based interventions are unlikely to be effective
- one proposed policy in this area is to require tech firms to pay users for permission to collect and use personal data
- discussion of the international context. Many of the technology firms have significant operations in multiple countries, so any policy may need to be agreed/coordinated by a number of countries. Firms might be considered to be 'footloose' in terms of tax avoidance
- examples of regulation of such firms by eg EU Competition Commissioner's fine for Google
- recognition of how many concerns about the large Internet firms are about data protection and privacy rather than economic concerns
- overall assessment about whether there ought to be more intervention in this market, and whether it should be by breaking up the firms
- explanation of how the recent history has featured the natural demise of seemingly dominant firms in the information market (eg Myspace, AskJeeves, IBM) without any government intervention
- discussion of productive, allocative and dynamic efficiency
- market failure arguments
- government failure arguments.

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the student's response to the question.

**Use the level mark scheme on page 4 to award students marks for this question.**

**MAXIMUM FOR QUESTION 10: 25 MARKS**

**Essay 2**

**Total for this essay: 40 marks**

**1 1**

*Explain how a production possibility diagram can be used to illustrate some features of the fundamental economic problem.*

**[15 marks]**

**Areas for discussion include:**

- definition of the ‘fundamental economic problem’
- definition of PPF/PPD
- explanation of how a PPF shows the trade-offs implicit in an economy’s decision over what to produce and resource allocation
- explanation of opportunity costs
- explanation of why PPFs tend to be convex to the origin
- how all points on a PPF are productively efficient, where all factors of production are being put to good use and production is at its lowest cost
- how moving from one point on the PPF to another point on the PPF means necessarily sacrificing some production of the first good for the second
- how an economy at a point inside a PPF suggests unemployed factors of production, and that expanding production to the PPF can result in short-run economic growth
- the significance of shifts in the PPF outwards or inwards in terms of productive capacity
- explanation of why points on a PPF are productively efficient, but they aren’t all allocatively efficient
- a PPF drawn to show the possible production combinations between consumption and capital goods could be used to explain how dynamic efficiency is possible, if factor inputs are deployed to the capital sector, where the quantity and quality of capital might increase

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the student’s response to the question.

**Use the level mark scheme on page 15 to award students marks for this question.**

**MAXIMUM FOR QUESTION 11: 15 MARKS**

**1 2**

*Evaluate the view that government intervention to reduce inequality will lead to an improvement in economic welfare.*

**[25 marks]**

**Areas for discussion include:**

- definitions of inequality
- knowledge of recent statistics and trends in inequality
- discussion of measures of inequality
- discussion of the broad range of policies to tackle inequality, including
  - taxation
  - welfare state/social security provision
  - tax credits
  - inheritance tax/mansion tax/wealth taxes
  - equal opportunities legislation
  - policies to reduce inequality in market incomes, such as subsidised university tuition fees, minimum wages, state-funded school education/school lunches
- discussion of the benefits to such government policies
  - increases in aggregate demand from lower-income households having higher MPC
  - reduction in external costs of inequality such as lower crime, better mental health, better educational achievement
  - reduced poverty
  - improving incentive effects for those at the bottom of the income scale
  - reduction in speculative bubbles
- discussion of trickle-down economic theory and the idea that low-tax regimes encourage hard work, enterprise and investment
- the impact of government policies on tax revenue (ie the Laffer Curve)
- the idea that excessive tax will threaten job creation, encourage capital flight, brain drain and incentives to avoid tax
- how policies designed to reduce inequality may result in inefficient allocation of resources if some workers withdraw from the labour market
- knowledge of recent policies in the UK and elsewhere which have had an impact on inequality and other economic objectives.

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the student's response to the question.

**Use the level mark scheme on page 4 to award students marks for this question.**

**MAXIMUM FOR QUESTION 12: 25 MARKS**

**Essay 3****Total for this essay: 40 marks****1 3***Explain why imperfect information can lead to market failure.***[15 marks]****Areas for discussion include:**

- definition of imperfect information and market failure
- why imperfect information may be considered a source of market failure
- explanation of asymmetric information and how it can lead to some markets working inefficiently (or even collapsing altogether) when sellers know more about the true value of the good or service they are selling than the buyers (ie the 'Market for Lemons')
- explanation of moral hazard, where agents (knowing more about their risk profile than the insurer does) take excessive risk because they are protected from the negative consequences of their actions by insurance, thus leading to market failure
- how imperfect information can lead to the under-provision of merit goods and over-provision of demerit goods
- how imperfect information does not merely mean the absence of information. Information can also be imperfect if it is presented unhelpfully or incompletely such that making good decisions becomes very difficult
- agents may suffer from bounded rationality and cognitive biases
- agents may value short-term benefits too much due to a lack of information which could lead to poverty, eg lack of saving for pensions
- examples of markets in which imperfect information causes problems, eg the labour market, the cigarette market, the market for insurance.

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the student's response to the question.

**Use the level mark scheme on page 15 to award students marks for this question.**

**MAXIMUM FOR QUESTION 13: 15 MARKS**

**1 4**

*Assess the view that price discrimination is always damaging.*

**[25 marks]**

**Areas for discussion include:**

- definition of price discrimination
- the conditions necessary for price discrimination
- discussion of different types of price discrimination
- the disadvantages of price discrimination (higher price for many consumers, loss of consumer surplus, pricing seen as unfair eg for captive consumers such as rail season ticket holders)
- the advantages of price discrimination (lower prices for some customers with lower demand, typically those from low income households, customers with highest utility of a good or service likely to obtain the good, output likely to be higher than would be the case from a non-discriminating monopolist)
- price discrimination may be preferable to a single-price which results in secondary markets developing (eg ticket touts)
- price discrimination is good for the monopolist, increasing revenues and profits
- price discrimination is good for consumers who would otherwise have been unable to afford a good or service (eg last-minute holiday bookings) eases the impact of inequalities
- price discrimination may allow for cross-subsidisation of unprofitable goods or services
- the negative image of price discrimination, especially relating to accusations of exploitation levelled at monopolists in response to natural disasters
- discussion of the alternative to a discriminating monopolist (likely to be a non-discriminating monopolist rather than a competitive market)
- use of examples
- market failure arguments.

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the student's response to the question.

**Use the level mark scheme on page 4 to award student marks for this question.**

**MAXIMUM FOR QUESTION 14: 25 MARKS**