

# A-level ECONOMICS 7136/1

PAPER 1 Markets and Market Failure

---

Mark scheme

June 2021

---

Version 1.0 Final Mark Scheme



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.

Further copies of this mark scheme are available from [aqa.org.uk](http://aqa.org.uk)

**Copyright information**

AQA retains the copyright on all its publications. However, registered schools/colleges for AQA are permitted to copy material from this booklet for their own internal use, with the following important exception: AQA cannot give permission to schools/colleges to photocopy any material that is acknowledged to a third party even for internal use within the centre.

Copyright © 2021 AQA and its licensors. All rights reserved.

## 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 mean amount of profit that pharmaceutical companies would have made on a new drug in 2019, given that the average development cost was \$2.6bn. Give your answer to the **nearest million dollars**.  
**[2 marks]**

Calculation:  $\$2.6\text{bn} \times 1.8\% = \$46\,800\,000$

Correct answer is: \$47 million

<b>Response:</b>	<b>Max 2 marks</b>
For the correct answer, to nearest million, with \$ sign	<b>2 marks</b>
For the correct answer but without the \$ sign <b>and/or</b> not to nearest million <b>OR</b> For the correct method, but the wrong answer, to nearest million, 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 greater competition leads to lower prices in the market for generic drugs.*

**[4 marks]**

<b>Response:</b>	<b>Max 4 marks</b>
<ul style="list-style-type: none"> <li>includes evidence that shows how greater competition leads to lower prices for generic drugs.</li> <li>clearly explains how this data is evidence that greater competition leads to lower prices for generic drugs.</li> </ul>	<b>4 marks</b>
<ul style="list-style-type: none"> <li>includes evidence that shows how greater competition leads to lower prices for generic drugs.</li> <li>explanation of how this data is evidence that greater competition leads to lower prices for generic drugs.</li> </ul>	<b>3 marks</b>
<ul style="list-style-type: none"> <li>includes some evidence that shows how greater competition leads to lower prices for generic drugs.</li> <li>limited explanation of how this data is evidence that greater competition leads to lower prices for generic drugs.</li> </ul>	<b>2 marks</b>
<ul style="list-style-type: none"> <li>includes evidence that does not clearly show how greater competition leads to lower prices for generic drugs.</li> <li>no explanation of how this data is evidence that greater competition leads to lower prices for generic drugs.</li> </ul>	<b>1 mark</b>

**Relevant issues include:**

- explanation of why greater competition may lead to lower prices for generic drugs
- explains that an increase in the number of firms (generic drug manufacturers) indicates that there is greater competition in the market
- generic prices are lower than prices of drugs still protected by patent (61% or less of the patent price on average)
- there is a steady decline in the price as % of patented price as more firms are added to a market, at least until the eighth firm
- the entry of the second firm to a market has the biggest impact on price as % of patented price (61% to 46%), followed by the third firm (46% to 32%) and then the fourth firm (32% to 21%) which suggests that the marginal impact on price of each additional firm reduces
- if there are 9 or 10+ firms in a market, prices are very low compared to patented prices (1.2% and 1.0% respectively).

**MAXIMUM FOR QUESTION 02: 4 MARKS**

**0 3**

**Extract B** (lines 9–10) states: ‘After the monopoly’s patent expires, other companies can manufacture and market the same drug under its generic name, usually at a lower price’.

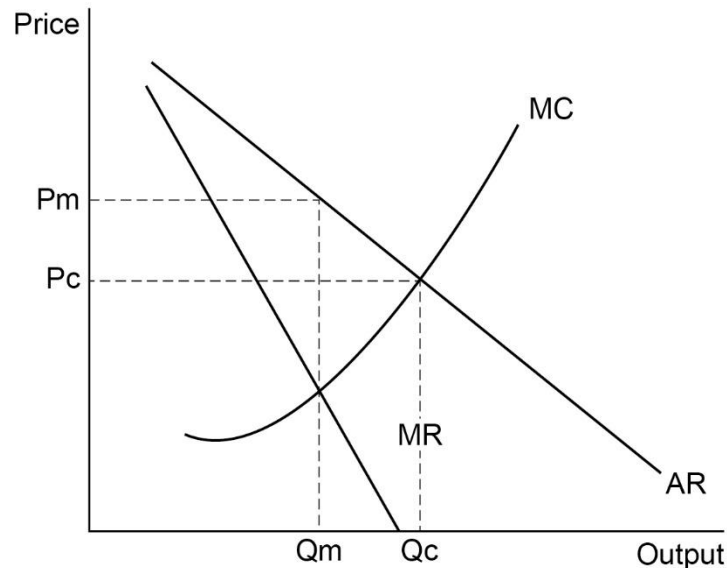
With the help of a diagram, explain why prices of pharmaceutical drugs supplied by a monopoly are likely to be higher than in markets which are more competitive.

**[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**

A monopoly/competitive market diagram is expected, showing how monopolists may restrict output and set a higher price,  $P_m$ , than they would in a competitive market,  $P_c$ . However, other appropriate diagrams should be given credit.

**Relevant issues include:**

- definitions of monopoly and competition
- explanation of the diagram, showing price-making behaviour of monopolists, resulting in higher prices and lower output. Comparison with price-taking behaviour of firms in a competitive sector, where output is higher and prices are lower
- less pressure to keep down costs in a monopoly
- explanation of the role of patents in pharmaceutical monopolies
- explanation of high development costs for new drugs leading to high prices, including the costs of research, testing, marketing and regulatory approval
- explanation of how very low marginal costs result in low prices once patent expires
- new, innovative drugs are even more expensive to develop than previous generations of new drugs thanks to new technologies such as personalised pharmaceuticals
- over-reliance on one or two key suppliers for patented drugs – if they collapse, prices will increase substantially. In competitive markets no one firm is critical to the market.

**MAXIMUM FOR QUESTION 03: 9 MARKS**



**0 4**

**Extract C** (lines 1–3) states: ‘The market for most generic drugs is oligopolistic, with just two or three manufacturers making each product. This enables significant economies of scale within firms, but also presents the risk of consumer interests being harmed.’

Using the extracts and your knowledge of economics, assess the view that the market structure of the pharmaceutical industry is damaging for consumers.

**[25 marks]**

**Areas for discussion include:**

- explanation of pharmaceutical market structure
- discussion of consumer interests in this market: low and stable prices, safe and effective products, access to drugs (these are merit goods)
- discussion of the role the NHS plays in acting as a monopsonistic buyer of pharmaceuticals in the UK, whereas in the USA and elsewhere, there are many more buyers
- the oligopolistic nature of the generics market, with a small number of firms typically producing each drug, and the opportunity for collusion and price-fixing, especially as there is little or no branding of products
- the fact that monopoly power is legally granted to firms in order to encourage research and development into new drugs. The advantage of this is that new drugs are invented. The disadvantage is that it can take 20 years for lifesaving drugs to become more affordable
- the ability of pharmaceutical firms to exploit monopoly power and inelastic demand by massively increasing prices
- the importance of economies of scale
- the importance of dynamic efficiency and links to market structure
- the significance of productive and allocative efficiency
- in generic pharmaceutical markets, oligopoly power can lead to tacit or collusive price-setting
- very high levels of investment in research and development for new drugs and treatments, contributing to rising life expectancy and improved survival rates, for example cancer and HIV/AIDS
- discussion of possible policies at the national level which may impact on consumer interests, eg regulation by the CMA
- 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 a worker of Bangladeshi ethnicity earned on average in 2018, given that a White British worker earned £28 677. Give your answer **to the nearest pound**.

**[2 marks]**

Calculation: £28 677 × 0.798 = £22 884.25

Answer: £22 884

<b>Response:</b>	<b>Max 2 marks</b>
For the correct answer, to the nearest pound, with units	<b>2 marks</b>
For the correct answer but not rounded to the nearest pound, <b>and/or</b> without units <b>OR</b> For the correct method, but the wrong answer, to the nearest pound, 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 the ethnic pay gap is more significant for older ethnic minority employees.

**[4 marks]**

<b>Response:</b>	<b>Max 4 marks</b>
<ul style="list-style-type: none"> <li>includes evidence that the ethnic pay gap is more significant for older ethnic minority employees</li> <li>clearly explains how this data is evidence that the ethnic pay gap is more significant for older ethnic minority employees.</li> </ul>	<b>4 marks</b>
<ul style="list-style-type: none"> <li>includes evidence that the ethnic pay gap is more significant for older ethnic minority employees</li> <li>explanation of how this data is evidence that the ethnic pay gap is more significant for older ethnic minority employees.</li> </ul>	<b>3 marks</b>
<ul style="list-style-type: none"> <li>includes some evidence that the ethnic pay gap is more significant for older ethnic minority employees</li> <li>limited explanation of how this data is evidence that the ethnic pay gap is more significant for older ethnic minority employees.</li> </ul>	<b>2 marks</b>
<ul style="list-style-type: none"> <li>includes evidence that does not clearly show that the ethnic pay gap is more significant for older ethnic minority employees</li> <li>no explanation of how this data is evidence that the ethnic pay gap is more significant for older ethnic minority employees.</li> </ul>	<b>1 mark</b>

**Relevant issues include:**

- explanation of what is meant by the ethnic pay gap
- in all ethnic groups shown where there is a negative pay gap, the gap is greater for those aged 30+ than those aged 16–30
- Bangladeshis have the biggest difference in pay gap by age (27.9% for over 30s vs 3.1% for 16–30s)
- very small difference in pay gap by age for ‘Any other Asian’ though the gap still exists
- In all ethnic groups shown where there is a positive pay gap, the gap is less for those aged 30+ than those aged 16–30
- workers of Chinese ethnicity earn more than White British workers, but the gap is less for over–30s (30%) than 16–30s (42%).

**MAXIMUM FOR QUESTION 06: 4 MARKS**

**0 7**

**Extract F** (lines 18–19) states: the Government ‘could also take steps to recognise foreign qualifications, thus removing obstacles for well-qualified foreign-born workers.’

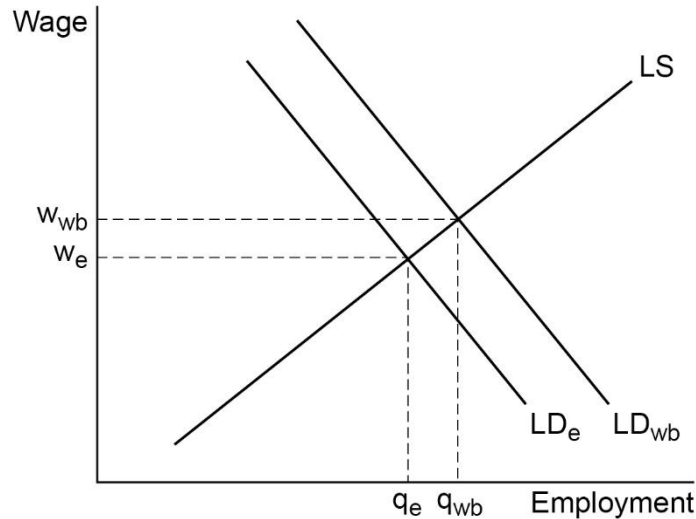
With the help of a diagram, explain how UK firms not recognising foreign qualifications may lead to some ethnic groups receiving lower pay.

**[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 labour market diagram is expected, showing how market demand for the labour of White British workers ( $LD_{wb}$ ) may exceed that of ethnic minority workers ( $LD_e$ ). For a given labour supply curve, this is likely to result in lower wages for ethnic minority workers (and lower employment levels).

However, other appropriate diagrams should be given credit.



**Relevant issues include:**

- explanation of the diagram
- explanation of the importance of qualifications in applying for positions in the labour market
- types of qualifications which UK employers value, eg GCSEs, A-Levels, degrees, PhDs
- explaining that firms will have different demand for workers if only some qualifications are accepted, even if the workers are otherwise identically qualified
- even if foreign qualifications are legally acceptable, UK employers may not know much about them and thus discount them in recruitment and promotion decisions
- link between not recognising foreign qualifications and perceived MRP of some ethnic groups
- different elasticities of supply between different ethnic groups due to problems with recognition of foreign qualifications
- impact on labour supply of skills and qualifications (NB: students who draw a diagram showing different labour supply curves must justify their choice of diagram by providing analysis of why the labour supply curves differ)
- the failure to recognise foreign qualifications may lead to workers with foreign qualifications working in labour markets where few skills are needed, increasing the supply of labour and reducing the average pay of some ethnic groups.

**MAXIMUM FOR QUESTION 07: 9 MARKS**

**0 8**

**Extract E** (lines 3–4) states: ‘significant gaps remain, even when education and occupation are taken into account, particularly for those born outside the UK.’

Using the extracts and your knowledge of economics, evaluate possible government policies to reduce the ethnic pay gap.

**[25 marks]**

**Areas for discussion include:**

- there is a significant negative ethnic pay gap between White British and most other workers, with particularly large gaps between Bangladeshi and Pakistani workers
- reasons why the pay gap exists
- reasons why the pay gap differs across different ethnic minorities
- reasons why the pay gap seems to be declining
- recognition that the pay gap exists even after controlling for education and occupation
- costs of the pay gap (eg inefficiency/misallocation of workers and resources, inequality, poverty, unfairness)
- macroeconomic impacts of the ethnic pay gap (eg reduced GDP)
- the fact that some ethnic groups earn more than White British workers, suggesting that this is not necessarily a problem of discrimination or unfairness, but more a reflection of cultural, educational and social differences and inequalities
- discussion of a range of policies to include:
  - anti-discrimination legislation (already in place)
  - requiring all/large firms to disclose data about ethnic pay gaps
  - requiring all/large firms to publish policies to close existing pay gaps
  - public sector organisations leading by example with transparency and plans to tackle the pay gap
  - accepting foreign qualifications such as school certificates, driving licences, etc
  - ethnic quotas on boards of companies/senior management roles
  - encouraging greater labour force participation by certain ethnic groups
- overall view of whether policies aimed at reducing the pay gap would be beneficial
- 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

Level of response	Response:	Max 15 marks
3	<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>	11–15 marks
2	<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>	6–10 marks
1	<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>	1–5 marks

**Section B**

**Essay 1**

**Total for this essay: 40 marks**

**0 9**

*Explain how perfect competition should lead to outcomes which are **both** productively and allocatively efficient.*

**[15 marks]**

**Areas for discussion include:**

- definitions of perfect competition, productive efficiency, allocative efficiency
- explanation of the assumptions of perfect competition
- explanation of how and why firms are forced to be price-takers in perfect competition
- the ability to earn supernormal profits is restricted. In the short run, perfectly competitive firms may make some supernormal profit, in the long run such profits will be eroded by new entrants joining the market or existing competitors expanding output. This contributes to allocative and productive efficiency
- explanation of how firms must produce output at the lowest point on the average cost curve. Any productive inefficiency will be punished by other more efficient firms selling at a lower price
- explanation of the condition for allocative efficiency ( $P=MC$ ) and how and why this will be ensured in perfect competition.

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
---	---

*Evaluate the view that technological change tends to bring industries closer to the market structure of perfect competition.*

**[25 marks]**

**Areas for discussion include:**

- definition of technological change, perfect competition
- discussion of the features of competitive markets in relation to technological change and market structure
- recognition that perfect competition is an unattainable ideal in many sectors, and is best thought of as one end of a spectrum of market structures to which sectors should (arguably) be guided
- in some sectors, the use of the internet and other technological innovation has hugely improved price transparency, thus minimising information asymmetry and getting closer to perfect information (eg price comparison websites, insurance brokers)
- in some sectors, firms have strengthened dominant positions by erecting barriers to entry such as massive economies of scale and advanced inventory systems (eg Amazon)
- the impact of artificial intelligence, robotics, and retention of personal data on markets, making markets less competitive, eg online customers now receiving personalised adverts
- the improvement of communications has led to improved information flows and made some markets more competitive, but has also led to the demise of other sectors, eg streaming replacing CDs and radio to an extent
- the impact of technology on reducing average costs and thus potentially reducing prices
- the impact of technology on the number of sellers in a market, eg possibility of starting a business with a laptop from a bedroom
- the impact of technological change on homogeneity of products and services
- discussion of productive, allocative and dynamic efficiency
- discussion of Schumpeterian creative destruction
- examples of markets that have become more competitive
- examples of markets that have become more concentrated
- overall assessment about whether technological change tends to bring industries closer to the market structure of perfect competition.

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 the concept of cross elasticity of demand can be used to understand the relationship between markets.*

**[15 marks]**

**Areas for discussion include:**

- definition of cross elasticity of demand (XED)
- understanding the formula for calculation of XED
- explanation of numerical values of XED and how they relate to substitutes/complements/non-related goods
- examples of substitute goods
- examples of complementary goods/goods in joint demand
- explanations of diagrams showing interrelated markets and cross elasticity of demand
- examples of how changes in one market affect other markets, and the significance of the XED.

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**

*Discuss the view that individual economic agents will always act as rational decision makers so as to maximise their utility.*

**[25 marks]**

**Areas for discussion include:**

- definitions of rational, maximise, utility, economic agents
- assumptions underlying traditional economic theory
- explanation of total and marginal utility
- the hypothesis of diminishing marginal utility and how it links to the downward-sloping demand curve
- discussion of utility maximisation
- the importance of the margin when making choices
- problems with measuring utility and thus being able to maximise it
- the importance of information for decision making and the problems faced by utility maximisers when dealing with imperfect information
- how the assumptions of behavioural economics compare with those of traditional economic theory
- bounded rationality and bounded self-control
- biases in decision-making such as: rules of thumb, anchoring, availability and social norms
- how behavioural economic actions can be used to suppress rationality (eg by marketing) or to improve rationality (eg by public health adverts)
- the existence of alternative objectives to utility maximisation, eg focusing on relationships, altruism, self-sufficiency
- consideration of the word 'always'.

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 how a firm may benefit from **both** internal and external economies of scale.

**[15 marks]**

**Areas for discussion include:**

- definition of economies of scale
- the difference between internal and external economies of scale
- explanation of types of internal economies of scale, eg purchasing, financial, networking, technical, risk-bearing
- the L-shaped long run average cost curve
- the concept of the minimum efficient scale of production
- explanation of types of external economies of scale, eg industry expertise, improved transport and communication links, connections with universities
- 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 13: 15 MARKS**

**1 4**

*Discuss how the divorce of ownership from control may affect **both** the conduct and performance of firms.*

**[25 marks]**

**Areas for discussion include:**

- explanation of the divorce of ownership from control
- explanation of what is meant by conduct and performance of firms
- traditional theories of the firm rest on the assumption that firms are profit maximising
- explanation of the profit-maximising condition and discussion of other objectives such as revenue maximisation, sales growth maximisation and satisficing
- for all but the smallest firms, the owners are not the same economic agents as the managers and workers, leading to a classic principal-agent problem
- explanation of how the divorce of ownership from control affects the conduct of firms, eg pursuing objectives other than profit maximisation, as agents deviate from wishes of owners
- explanation of how the divorce of ownership from control affects the performance of firms, eg impact on efficiency, diseconomies of scale, and thus financial performance indicators such as profits/market share
- comparisons between family firms, listed firms and other types of organisations
- discussion of how owners may address the principal-agent problem by designing remuneration schemes to align objectives, eg payment in shares, use of performance-related pay
- discussion of how many owners are actively involved in controlling firms via seats on boards, and even small shareholders have opportunities to vote on key decisions made by the board at annual general meetings
- use of examples
- overall view on whether the divorce of ownership from control has a significant impact on the conduct and performance of firms.

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**