GCE

Economics

Unit **H460/01**: Microeconomics

Advanced GCE

Mark Scheme for June 2017
OCR (Oxford Cambridge and RSA) is a leading UK awarding body, providing a wide range of qualifications to meet the needs of candidates of all ages and abilities. OCR qualifications include AS/A Levels, Diplomas, GCSEs, Cambridge Nationals, Cambridge Technicals, Functional Skills, Key Skills, Entry Level qualifications, NVQs and vocational qualifications in areas such as IT, business, languages, teaching/training, administration and secretarial skills.

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This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which marks were awarded by examiners. It does not indicate the details of the discussions which took place at an examiners’ meeting before marking commenced.

All examiners are instructed that alternative correct answers and unexpected approaches in candidates’ scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the report on the examination.

OCR will not enter into any discussion or correspondence in connection with this mark scheme.

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### Annotations

<table>
<thead>
<tr>
<th>Annotation</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>BP</td>
<td>Blank Page – this annotation must be used on all blank pages within an answer booklet (structured or unstructured) and on each page of an additional object where there is no candidate response.</td>
</tr>
<tr>
<td>✔</td>
<td>Correct – mark awarded</td>
</tr>
<tr>
<td>✗</td>
<td>Incorrect</td>
</tr>
<tr>
<td>BOD</td>
<td>Benefit of doubt</td>
</tr>
<tr>
<td>KU</td>
<td>AO1 – Knowledge and understanding</td>
</tr>
<tr>
<td>APP</td>
<td>AO2 – Apply knowledge and understanding</td>
</tr>
<tr>
<td>AN</td>
<td>AO3 - Analyse</td>
</tr>
<tr>
<td>EVAL</td>
<td>AO4 - Evaluation</td>
</tr>
<tr>
<td>NAQ</td>
<td>Not answering question</td>
</tr>
<tr>
<td>SEEN</td>
<td>Noted but no credit given</td>
</tr>
<tr>
<td>TV</td>
<td>Too vague</td>
</tr>
<tr>
<td>OFR</td>
<td>Own figure rule</td>
</tr>
<tr>
<td>CON</td>
<td>Confused</td>
</tr>
<tr>
<td>?</td>
<td>Unclear</td>
</tr>
</tbody>
</table>
INTRODUCTION
Your first task as an Examiner is to become thoroughly familiar with the material on which the examination depends. This material includes:

- the specification, especially the assessment objectives
- the question paper and its rubrics
- the mark scheme.

You should ensure that you have copies of these materials. You should ensure also that you are familiar with the administrative procedures related to the marking process. These are set out in the OCR booklet Instructions for Examiners. If you are examining for the first time, please read carefully Appendix 5 Introduction to Script Marking: Notes for New Examiners.

Please ask for help or guidance whenever you need it. Your first point of contact is your Team Leader.

Rubric Infringement
Candidates may infringe the rubric in the following way:

- answering two questions from Section C.

If a candidate has written two answers for Section C, mark both answers and award the highest mark achieved.

USING THE MARK SCHEME
Please study this Mark Scheme carefully. The Mark Scheme is an integral part of the process that begins with the setting of the question paper and ends with the awarding of grades. Question papers and Mark Schemes are developed in association with each other so that issues of differentiation and positive achievement can be addressed from the very start.

This Mark Scheme is a working document; it is not exhaustive; it does not provide ‘correct’ answers. The Mark Scheme can only provide ‘best guesses’ about how the question will work out, and it is subject to revision after we have looked at a wide range of scripts.

The Examiners’ Standardisation Meeting will ensure that the Mark Scheme covers the range of candidates’ responses to the questions, and that all Examiners understand and apply the Mark Scheme in the same way. The Mark Scheme will be discussed and amended at the meeting, and administrative procedures will be confirmed. Co-ordination scripts will be issued at the meeting to exemplify aspects of candidates’ responses and achievements; the co-ordination scripts then become part of this Mark Scheme.

Before the Standardisation Meeting, you should read and mark in pencil a number of scripts, in order to gain an impression of the range of responses and achievement that may be expected.
In your marking, you will encounter valid responses which are not covered by the Mark Scheme: these responses must be credited. You will encounter answers which fall outside the ‘target range’ of Bands for the paper which you are marking. Please mark these answers according to the marking criteria.
Please read carefully all the scripts in your allocation and make every effort to look positively for achievement throughout the ability range. Always be prepared to use the full range of marks.

<table>
<thead>
<tr>
<th>Levels of response / Level descriptors</th>
<th>Knowledge and understanding / Application</th>
<th>Analysis</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strong</strong></td>
<td>Precision in the use of the terms in the question and applied in a focused way to the context of the question.</td>
<td>An explanation of causes and consequences, fully developing the links in the chain of argument.</td>
<td>A conclusion is drawn weighing up both sides, and reaches a supported judgement.</td>
</tr>
<tr>
<td><strong>Good</strong></td>
<td>Awareness of the meaning of the terms in the question and applied to the context of the question.</td>
<td>An explanation of causes and consequences, developing most of the links in the chain of argument.</td>
<td>A conclusion is drawn weighing up both sides, but without reaching a supported judgement.</td>
</tr>
<tr>
<td><strong>Reasonable</strong></td>
<td>Awareness of the meaning of the terms in the question and applied to the context of the question.</td>
<td>An explanation of causes and consequences, which omit some key links in the chain of argument.</td>
<td>Some attempt to come to a conclusion, which shows some recognition of the influencing factors.</td>
</tr>
<tr>
<td><strong>Limited</strong></td>
<td>Awareness of the meaning of the terms in the question.</td>
<td>Simple statement(s) of cause and consequence.</td>
<td>An unsupported assertion.</td>
</tr>
<tr>
<td>Question</td>
<td>Answer</td>
<td>Marks</td>
<td>Guidance</td>
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<tr>
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</tbody>
</table>
| 1 a i    | **What relationship does Fig.1 suggest existed between changes in real GDP and changes in rail passenger journeys between 2004 and 2015?**  
• A positive relationship (1).  
• As real GDP rises so do rail passenger journeys (1).  
• The % change in rail passenger journeys is generally higher than the % change in real GDP (1).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1     | (A02*1)  |
| 1 a ii   | **How would an economist explain this relationship?**  
• Rail travel is a normal good (1), so has a positive income elasticity of demand (1).  
• Rail travel is income elastic (1), which explains why the growth in rail passenger journeys is generally greater than the growth in real GDP (1).  
• As real GDP increases, more people likely to be in work (1), so more people travelling to and from work (1).  
• Higher real GDP / income makes rail journeys more affordable (1) which enables people to travel more for leisure purposes (1).  
• Demand for rail travel has a derived demand (1), so rising GDP indicate a rise in the demand for labour / leisure which increases the demand for rail travel leading to an increase in rail passenger journeys (1).                                                                                                                                                                                                                       | 2     | (A02*2)  |

**Also accept:**  
• Real GDP is a measure of the total value of goods and services produced (1), so an increase in rail passenger journeys will contribute to the increase in real GDP (1).  
• A rise in real GDP raises consumer confidence (1), which increases the amount of rail passenger journeys (1).
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
<th>Marks</th>
<th>Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 b</td>
<td>Identify and explain, using the stimulus material, one reason why the privatisation of the rail network has made it a more contestable market.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Rail infrastructure is owned and maintained by Network Rail (1) which removes a significant entry barrier in providing passenger rail services by TOCs (1).</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Rail infrastructure is owned and maintained by Network Rail (1) which reduces sunk costs of entry (1).</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• TOCs bid for franchises to operate passenger rail services (1) which allows for pool of potential entrants / contest for right to supply (1).</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Franchises last for a fixed time period (1) which allows a contest by potential entrants at the end of the franchise period (1).</td>
<td></td>
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<tr>
<td>2</td>
<td>A contestable market has the following characteristics</td>
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<tr>
<td></td>
<td>• no barriers to entry/exit</td>
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<tr>
<td></td>
<td>• low/zero sunk costs</td>
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<td></td>
<td>• the possibility of hit and run entry from a pool of potential entrants.</td>
<td></td>
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<tr>
<td></td>
<td>Max of 1 mark for any of these characteristics.</td>
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<tr>
<td></td>
<td>References to the number of TOCs / change in the number of TOCs are not relevant to this question.</td>
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<td>Annotate with 🚧</td>
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<td></td>
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<tr>
<td>Question</td>
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<td>Guidance</td>
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</tr>
<tr>
<td>1 c</td>
<td>Explain, using a diagram, why the high level of fixed costs in providing the infrastructure of the railway network make it an example of a natural monopoly</td>
<td>3</td>
<td>Up to 2 marks for a diagram which shows:</td>
</tr>
<tr>
<td></td>
<td>• A high level of fixed costs in the railway network means that the monopoly firm will have declining AC due to fixed costs being spread over a greater output (1).</td>
<td></td>
<td>• declining LRAC (1)</td>
</tr>
<tr>
<td></td>
<td>• Large economies of scale mean that LRAC is constantly declining (1).</td>
<td></td>
<td>• LRMC below LRAC (1)</td>
</tr>
<tr>
<td></td>
<td>• A single firm can satisfy market demand at a lower AC than two or more firms, so that competition is economically inefficient. (1)</td>
<td></td>
<td>• lower AC of a single firm supplying market demand (1)</td>
</tr>
<tr>
<td></td>
<td>• Total costs of provision of the good or service are lower with one firm supplying the market / wasteful duplication with more than one firm (1)</td>
<td></td>
<td>• higher AC of more than one firm supplying market (1)</td>
</tr>
<tr>
<td></td>
<td>• Economies of scale are large in comparison to market demand such that there is only ‘room’ for one firm in the market (1)</td>
<td></td>
<td>• demand curve showing economies of scale are large in comparison to market demand (1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>No marks for a monopoly diagram</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 mark for an explanation why the high level fixed costs in providing the infrastructure of the railway network make it an example of a natural monopoly.</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>Reference to economies of scale on its own, without reference to the size of the market / demand, is insufficient.</td>
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<td></td>
<td>Annotate with ✅</td>
</tr>
</tbody>
</table>
### Question 1: d i

**What evidence is there in the stimulus material of TOCs engaging in price discrimination?**

- Different prices are charged for a journey from Newcastle to London (1) at different times (1).

**Marks:** 2

**Guidance:** Annotate with ✓

### Question 1: d ii

**Evaluate the extent to which the consumer benefits from price discrimination by a firm with monopoly power.**

**Level 2 (5–8 marks)**

**Good knowledge and understanding** of the concept of price discrimination and of the impact of price discrimination on the consumer in a context provided by the candidate.

**Good – Strong analysis** of the ways in which price discrimination impacts upon the consumer

- **Good analysis** will be in the form of developed links. These links are developed through a chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct and linked to the analysis.

- **Strong analysis** will have consistently well-developed links through a coherent chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis.

**Reasonable – Strong evaluation** of the impact of price discrimination on the consumer considering both sides and underpinned by appropriate theoretical analysis.

- **Good evaluation** will weigh up both sides but without reaching a
**Mark Scheme**

**Supporting judgement.**

- **Strong evaluation** should include a supported judgement.

**Level 1 (1–4 marks)**

**Limited – Reasonable knowledge and understanding** of the concept of price discrimination and of the impact of price discrimination on the consumer in a context provided by the candidate.

**Limited – Reasonable analysis** of the ways in which price discrimination impacts on the consumer.

- **Limited analysis** will have little evidence of reasoning that addresses the question asked. There is a lack of a clear structure.

- **Reasonable analysis** will have correct analysis largely in the form of single links. These address the question **but** are not developed into a clear chain of reasoning. Any relevant diagram(s) may be imperfectly labelled or not linked to the analysis.

**Limited evaluation** of the impact of price discrimination on the consumer in the form of an unsupported statement or **no** evaluation.

**0 marks** no response or no response worthy of credit.

**Note:** although a diagram is **not** required, it may enhance the quality of the answer and should be rewarded at the appropriate level.

---

**Descriptor** | **Award mark**
--- | ---
Consistently meets the criteria for this level | At top of level
Meets the criteria but with some slight inconsistency | Above middle and either below top of level or at middle of level (depending on number of marks available)
Just enough achievement on balance for this level | Above bottom and either below middle or at middle of level (depending on number of marks available)
On the borderline of this level and the one below | At bottom of level

Because of this, price discrimination benefits consumers as it makes available a good or service which otherwise would not be available to consume.

On the other hand it can be argued that the monopoly supplier is simply separating the markets in order to reduce consumer surplus in all markets. In essence consumer surplus is converted into producer surplus. Compared to a competitive market all consumers may lose out due to the monopoly power.

The extent to which the consumer benefits from price discrimination by a firm with monopoly power depends on the nature of the good or service. For example, it could be argued that the potential to increase the number of consumers able to afford passenger rail services is a more important consideration than any negative impact on consumer surplus. This is because, passenger rail services could be considered to be a service with positive externalities and would otherwise be underprovided.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
<th>Marks</th>
<th>Guidance</th>
</tr>
</thead>
</table>
| 1 e *    | Evaluate, using evidence from the stimulus material, the case for private sector ownership of passenger rail services.  
Level 3 (9–12 marks)  
**Good knowledge and understanding** of private sector ownership in the context of passenger rail services, supported by the evidence in the stimulus material and / or the candidate’s own knowledge and understanding.  
**Good – Strong analysis** of the case for and against private sector ownership  
  • **Good analysis** will be in the form of developed links. These links are developed through a chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct and linked to the analysis.  
  • **Strong analysis** will have consistently well-developed links through a coherent chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis.  
**Good – Strong evaluation** of the case for private sector ownership, weighing up both sides/comparing alternatives.  
  • **Strong evaluation** should include a supported judgment.  
  
*There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.*  

Level 2 (5–8 marks)  
**Good knowledge and understanding** of private sector ownership in the context of passenger rail services, supported by the evidence in (AO1 x 1
AO2 x 1
AO3 x 5
AO4 x 5)

For a mark at the top of each level evidence must be provided from the stimulus material and / or the candidate’s own knowledge.

Private sector ownership means that firms are owned by individuals or by shareholders rather than the state. They, therefore, pursue their own objectives (profit maximisation, revenue maximisation etc) rather than those of the state.

The case for private ownership of rail services can be made by reference to the impact on rail fares (P = MC), productive efficiency (cost per passenger km), allocative efficiency (the maximisation of consumer satisfaction, dynamic efficiencies (innovation and improvements to rail services). These benefits can be analysed in terms of the profit motive, access to capital markets, and / or the impact of privatisation of passenger rail services on contestability / competition. A valid analysis of the case for private ownership, therefore, can argue that increased contestability / competition will increase economic efficiency, lower fares and improve the quality of passenger rail services.

Evidence for these benefits might include the franchising process creating competition / contestability, greater choice through open access competition, the fact that more services are promised on the East-Coast Line by private sector operators (Virgin and Stagecoach), the 50% increase in capacity, faster journey times, £140 million investment to improve service and travel experience of passengers and the removal of franchise in cases where financial commitments not met.
the stimulus material and / or the candidate’s own knowledge and understanding.

**Reasonable analysis** of the case for or against private sector ownership. There is correct analysis largely in the form of single links. These address the question but are not developed into a clear chain of reasoning. Any relevant diagram(s) may be imperfectly labelled or not linked to the analysis of the case for or against private sector ownership.

**Reasonable evaluation** of the case for private sector ownership.

There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence.

### Level 1 (1–4 marks)

**Limited – Reasonable knowledge and understanding** of private sector ownership in the context of passenger rail services, supported by the evidence in the stimulus material and / or the candidate’s own knowledge and understanding.

**Limited analysis** of the case for or against private sector ownership. Little evidence of reasoning that addresses the question asked. There is a lack of a clear structure.

**Limited evaluation** of the case for private sector ownership in the form of an unsupported statement or no evaluation.

The information is basic and communicated in an unstructured way. The information is supported by limited evidence and the relationship to the evidence may not be clear.

0 marks no response or no response worthy of credit.

**Note:** although a diagram is not required, it may enhance the quality of the answer and should be rewarded at the appropriate level.

<table>
<thead>
<tr>
<th>Descriptor</th>
<th>Award mark</th>
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</thead>
<tbody>
<tr>
<td>Consistently meets the criteria for this level</td>
<td>At top of level</td>
</tr>
<tr>
<td>Meets the criteria but with some slight inconsistency</td>
<td>Above middle and either below top of level or at middle of</td>
</tr>
</tbody>
</table>
The world price of oil fell from over $100 a barrel during 2014 to below $45 a barrel in 2016.

Evaluate, using an appropriate diagram(s), the usefulness of the free market forces of supply and demand in analysing commodity markets, such as oil.

**Level 5 (21–25 marks)**

**Good – Strong knowledge and understanding** of the nature of commodity markets, the operation of the free market forces of demand and supply in the context of commodity markets and how changes in demand and supply may explain price movements in commodity markets.

**Strong analysis** of how changes in demand and supply may explain price movements in commodity markets will have **consistently** well-developed links through a **coherent** chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis.

**Strong evaluation** of the impact of supply and demand on oil prices considering extent and alternatives and reaching a supported judgment.

*There is a well-developed and sustained line of reasoning which is coherent and logically structured. The information presented is entirely relevant and substantiated.*

**Level 4 (16–20 marks)**

**Good knowledge and understanding** of the nature of commodity markets and how changes in demand and supply may explain price movements in commodity markets. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis.

**On the other hand, the free market forces of demand**
markets, the operation of the free market forces of demand and supply in the context of commodity markets and how changes in demand and supply may explain price movements in commodity markets.

**Strong analysis** will have **consistently** well-developed links through a **coherent** chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis.

**Good evaluation** will weigh up both sides /comparing alternatives but without reaching a supported judgment.

*There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and in the most part substantiated.*

**Level 3 (11–15 marks)**

**Good knowledge and understanding** of the nature of commodity markets, the operation of the free market forces of demand and supply in the context of commodity markets and how changes in demand and supply may explain price movements in commodity markets.

**Good analysis** of the impact of supply and demand on oil prices

There is correct analysis in the form of developed links. These links are developed through a chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct and linked to the analysis.

**Reasonable evaluation** of the impact of supply and demand on oil prices considering extent and alternatives.

*There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence.*

**Level 2 (6–10 marks)**

**Good knowledge and understanding** of the nature of commodity markets, the operation of the free market forces of demand and supply and supply may not be useful in analysing commodity markets where there is government intervention or where these markets are dominated by a small number of buyers or sellers. For example, governments may offer subsidies to producers to artificially raise supply and lower prices or tax commodities to artificially reduce supply and raise prices. Government intervention may include production quotas or the use of production licenses to limit supply to reduce the depletion rate of some commodities, artificially reducing supply and raising prices. The fluctuation of prices caused by the free market forces of demand and supply may be limited by buffer stock schemes to over-ride market forces. Buffer stock schemes set price ceiling and price floors, with governments buying up stocks of commodities to reduce supply from \( P_4 \) to \( P_3 \) when prices are in danger of falling below the floor and selling stocks of commodities to raise supply from \( S_1 \) to \( S_2 \) when prices are likely to rise above the price ceiling.

The usefulness of demand and supply in analysing...
in the context of commodity markets and how changes in demand and supply may explain price movements in commodity markets.

**Reasonable analysis** of the impact of supply and demand on oil prices. There is correct analysis largely in the form of single links. These address the question but are not developed into a clear chain of reasoning. Any relevant diagram(s) may be imperfectly labelled or not linked to the analysis.

**Reasonable evaluation** of the impact of supply and demand on oil prices considering extent and alternatives.

*The information has some relevance, but is communicated in an unstructured way. The information is supported by limited evidence, the relationship to the evidence may not be clear.*

**Level 1 (1–5 marks)**

**Reasonable knowledge and understanding** of the nature of commodities, the free market forces of demand and supply and how changes in demand and supply may explain price movements in commodity markets.

**Limited or no analysis** of the impact of supply and demand on oil prices. There is little evidence of reasoning that addresses the question asked. There is a lack of a clear structure. The relevant diagram(s) may not be present or are incorrectly labelled.

**Limited evaluation** of the impact of supply and demand theory on oil prices in the form of an unsupported statement or no evaluation.

*Information presented is basic and may be ambiguous or unstructured. The information is supported by limited evidence.*

**0 marks** no response or no response worthy of credit.

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<td>Above bottom and either below middle or at middle of level (depending on number of marks available)</td>
</tr>
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</table>
| 3        | In April 2016 the U.K. National Minimum Wage for those aged 25 and over was increased by over 7% from £6.70 per hour to £7.20 per hour. It is now called the National Living Wage. Evaluation, using an appropriate diagram(s), the impact on an economy of an increase in the minimum wage. Level 5 (21–25 marks)  
**Good – Strong knowledge and understanding** of a National Minimum / Living Wage and the impact of an increase in the minimum wage in the context of an economy.  
**Strong analysis** will have **consistently** well-developed links through a **coherent** chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis.  
**Strong evaluation** of the impact an increase in the minimum wage weighing up both sides/comparing alternatives and reaching a supported judgment.  
*There is a well-developed and sustained line of reasoning which is coherent and logically structured. The information presented is entirely relevant and substantiated.*  
Level 4 (16–20 marks)  
**Good knowledge and understanding** of a National Minimum / Living Wage and the impact of an increase in the minimum wage in the context of an economy.  
**Strong analysis** will have **consistently** well-developed links through a **coherent** chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be  |
|          |                                                                                                                                          | 25    | For a mark at the top of each level the response should be in context.  
A response which does not address “an increase in the minimum wage” should be given a mark up to the mid-point in the Level awarded.  
A minimum wage acts as a price floor in the labour market and prevents wages in that labour markets from falling to the equilibrium wage rate.  
An increase in the minimum wage from MW_{original} to MW_{new} will increase the quantity of labour supplied from Q_2 to Q_4 but reduce the quantity of labour demanded from Q_1 to Q_3. There are different perspective on whether an increase in the minimum wage will create positive or negative impacts on an economy.  
There are several positive impacts of an increase in the minimum wage on an economy. From an equity perspective, an increase in the minimum wage can have several positive impacts. These include:  
- **Higher wages for workers:** An increase in the minimum wage can lead to higher wages for low-wage workers, which can improve their standard of living and increase their disposable income.  
- **Increased disposable income:** With higher wages, workers can afford to purchase more goods and services, which can stimulate economic growth.  
- **Economic stability:** An increase in the minimum wage can help to stabilize the economy by reducing poverty and inequality.  
- **Economic growth:** A higher minimum wage can lead to increased demand for goods and services, which can stimulate economic growth.  
|
Good evaluation will weigh up both sides/comparing alternatives but without reaching a supported judgment.

There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and in the most part substantiated.

Level 3 (11–15 marks)

Good knowledge and understanding of a National Minimum / Living Wage and the impact of an increase in the minimum wage in the context of an economy.

Good analysis of the negative and positive impacts of an increase in the minimum wage. There is correct analysis in the form of developed links. These links are developed through a chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct and linked to the analysis.

Reasonable evaluation of the impact an increase in the minimum wage considering both sides/comparing alternatives.

There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence.

Level 2 (6–10 marks)

Good knowledge and understanding of a National Minimum / Living Wage and the impact of an increase in the minimum wage in the context of an economy.

Reasonable analysis of the negative and positive impacts of an increase in the minimum wage. There is correct analysis largely in the form of single links. These address the question but are not developed into a clear chain of reasoning. Any relevant diagram(s) may be imperfectly labelled or not linked to the analysis.

Reasonable evaluation of an increase in the minimum wage,
considering both sides/comparing alternatives.

The information has some relevance, but is communicated in an unstructured way. The information is supported by limited evidence, the relationship to the evidence may not be clear.

Level 1 (1–5 marks)

Reasonable knowledge and understanding of a National Minimum / Living Wage and the impact of an increase in the minimum wage in the context of an economy.

Limited or no analysis of the negative and positive impacts of an increase in the minimum wage. There is little evidence of reasoning that addresses the question asked. There is a lack of a clear structure. The relevant diagram(s) may not be present or are incorrectly labelled.

Limited evaluation of an increase in the minimum wage in the form of an unsupported statement or no evaluation.

Information presented is basic and may be ambiguous or unstructured. The information is supported by limited evidence.

0 marks no response or no response worthy of credit.

The argument that minimum wages reduce employment very much depends on the nature of the particular labour market affected by a minimum wage. Where there is a monopsony employer, the marginal cost of labour will exceed the average cost. Such employers reduce both wages (to $W_{\text{min}}$ the diagram) employment (from $Q_1$ to $Q_2$). A minimum wage of $MW_{\text{original}}$ could both increase wages and increase employment. However, an increase in this minimum wage to $MW_{\text{new}}$ would actually reduce employment back to $Q_1$ whilst increasing wages.

The impact on an economy of an increase in the minimum wage will can have significant impact on some labour markets but will have no impact in labour markets where the equilibrium wage is greater than the minimum wage e.g. high skill occupations. Much depends on the size of the increase, in particular in relation to inflation and changes in productivity. Whilst economic theory predicts that there would be an increase in unemployment, this would not be the case if the increase was introduced at a time of economic growth as the demand for labour would be increasing. Impacts on international competitiveness...
depend on the level of the minimum wage compared to other countries, especially major international competitors.

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Perfect competition theory is based on a set of very unrealistic assumptions. Evaluate the usefulness of perfect competition theory in explaining the behaviour of firms in the real world.

Level 5 (21–25 marks)

Good – Strong knowledge and understanding of perfect competition and of the behaviour of firms in the context of specific markets and industries.

Strong analysis will have consistently well-developed links through a coherent chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis.

Strong evaluation of the usefulness of perfect competition theory in explaining business behaviour weighing up both sides/comparing alternatives and reaching a supported judgment.

There is a well-developed and sustained line of reasoning which is coherent and logically structured. The information presented is entirely relevant and substantiated.

Level 4 (16–20 marks)

Good knowledge and understanding of perfect competition and of the behaviour of firms in the context of specific markets and industries.

Strong analysis will have consistently well-developed links through a coherent chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis.

Good evaluation will weigh up both sides/comparing alternatives but...
without reaching a supported judgment.

There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and in the most part substantiated.

**Level 3 (11–15 marks)**

**Good knowledge and understanding** of perfect competition and of the behaviour of firms in the context of specific markets and industries.

**Good analysis** of the usefulness of perfect competition theory in explaining business behaviour. There is correct analysis in the form of developed links. These links are developed through a chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct and linked to the analysis.

**Reasonable evaluation** of the usefulness of perfect competition theory in explaining business behaviour.

There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence.

**Level 2 (6–10 marks)**

**Good knowledge and understanding** of perfect competition and of the behaviour of firms in the context of specific markets and industries.

**Reasonable analysis** of usefulness of perfect competition theory in explaining business behaviour. There is correct analysis largely in the form of single links. These address the question but are not developed into a clear chain of reasoning. Any relevant diagram(s) may be imperfectly labelled or not linked to the analysis.

**Reasonable evaluation** of the usefulness of perfect competition theory in explaining business behaviour considering both sides/comparing alternatives.

The information has some relevance, but is communicated in an unstructured way. The information is supported by limited evidence.

one or more of the conditions of perfect competition are not met. For example, firms do not always profit maximise, products are differentiated, markets might be dominated by one or a few sellers, collusion amongst sellers may occur. Illustrations of the above using real world examples. There is also the issue of whether competition is necessary for the behaviour of firms to bring about efficiency gains. Actual competition (number of firms) may not be as important as potential competition (contestability)

No one theory is able to explain the business behaviour in the real world. Perfect competition theory is, therefore, one of many theories explaining likely behaviour in a range of market structures. The usefulness of economic theories should be judged on the accuracy of their predictions rather than the realism of their assumptions
the relationship to the evidence may not be clear.

**Level 1 (1–5 marks)**

**Reasonable knowledge and understanding** of perfect competition and of the behaviour of firms in the context of specific markets and industries.

**Limited or no analysis** of the usefulness of perfect competition theory in explaining business behaviour. There is little evidence of reasoning that addresses the question asked. There is a lack of a clear structure. The relevant diagram(s) may not be present or are incorrectly labelled.

**Limited evaluation** of the usefulness of perfect competition theory in explaining business behaviour in the form of an unsupported statement or **no** evaluation.

*Information presented is basic and may be ambiguous or unstructured. The information is supported by limited evidence.*

**0 marks** no response or no response worthy of credit.

**Note:** although a diagram is **not** required, it may enhance the quality of the answer and should be rewarded at the appropriate level.

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| 5        | Profit maximisation is an unrealistic objective and does not explain the behaviour of firms in the real world. Evaluate the extent to which profit maximization is the most important objective influencing the activities of a firm in the real world. Level 5 (21–25 marks) Good – Strong knowledge and understanding of profit maximisation and of the activities of firms in the context of specific markets and industries. Strong analysis will have consistently well-developed links through a coherent chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis. Strong evaluation of the extent to which profit maximization is the most important factor influencing choice of objectives, weighing up both sides/comparing alternatives and reaching a supported judgment. There is a well-developed and sustained line of reasoning which is coherent and logically structured. The information presented is entirely relevant and substantiated. Level 4 (16–20 marks) Good knowledge and understanding of profit maximisation and of the behaviour of firms using real world examples. Strong analysis will have consistently well-developed links through a coherent chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis. | 25    | For a mark at the top of each level the response should be in context. 

Profits are maximised at the level of output where MR = MC. This can be illustrated and explained with the use of diagram(s) and compared to other business objectives. Profit maximisation is an important objective because of the ability to fund investment, allowing a firm to be dynamically efficient, reward shareholders in terms of higher dividend payments, reward and incentivise workers with higher wages and / or fringe benefits, reward and incentivise managers through profit-sharing schemes, resist takeovers and achieve growth through mergers / takeovers which increases horizontal and vertical integration. There are, however, limitations of profit maximisation as an objective. Arguably the main limitation is that it is difficult to identify the marginal cost and marginal revenue, especially for multi-product firms because of the lack of information about cost structures. The divorce of ownership from control and the principal-agent problem means that large firms in particular may pursue other objectives such as revenue maximisation, sales maximisation, satisficing behaviour and corporate social responsibility. Whether profit maximisation is an important objective influencing the activities of firms in the real world depends on the type of business organisation. It is much more likely for public limited companies than other types of business organisation. For example, profit maximisation is less likely to be an important objective for public sector organisations and charities. For organisations in the public sector. |
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| **Good evaluation** will weigh up both sides/comparing alternatives but without reaching a supported judgment.  
*There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and in the most part substantiated.* | providing employment, cross subsidisation, universal service, provision of merit goods or goods / services with positive externalities may be more important. Overall it is difficult to establish what is the most important objective for a firm as this may change over time – profit may be sacrificed in the short term, for example, yet maximised in the long term. Business behaviour is complex and dynamic, so no one objective is likely to be realistic at any one point in time. |
| **Good knowledge and understanding** of profit maximisation and of the activities of firms in the context of specific markets and industries.  
**Good analysis** of the factors influencing the choice of objectives. There is correct analysis in the form of developed links. These links are developed through a chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct and linked to the analysis.  
**Reasonable evaluation** of the extent to which profit maximization is the most important factor influencing choice of objectives, considering both sides/comparing alternatives.  
*There is a line of reasoning presented with some structure. The information presented is in the most part relevant and supported by some evidence.* | **Good knowledge and understanding** of profit maximisation and of the activities of firms in the context of specific markets and industries.  
**Reasonable analysis** of the factors influencing the choice of objectives. There is correct analysis largely in the form of single links. These address the question but are not developed into a clear chain of reasoning. Any relevant diagram(s) may be imperfectly labelled or not linked to the analysis.  
**Reasonable evaluation** of the extent to which profit maximization is the most important factor influencing choice of objectives, considering both sides/comparing alternatives.  
*The information has some relevance, but is communicated in an
unstructured way. The information is supported by limited evidence, the relationship to the evidence may not be clear.

**Level 1 (1–5 marks)**

**Reasonable knowledge and understanding** of profit maximisation and of the activities of firms in the context of specific markets and industries.

**Limited or no analysis** of the factors influencing the choice of objectives. There is little evidence of reasoning that addresses the question asked. There is a lack of a clear structure. The relevant diagram(s) may not be present or are incorrectly labelled.

**Limited evaluation** of the extent to which profit maximization is the most important factor influencing choice of objectives in the form of an unsupported statement or **no** evaluation.

*Information presented is basic and may be ambiguous or unstructured. The information is supported by limited evidence.*

**0 marks** no response or no response worthy of credit.

**Note:** although a diagram is **not** required, it may enhance the quality of the answer and should be rewarded at the appropriate level.

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### Assessment Objectives Grid

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