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**1<sup>st</sup> Paper of 4**

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## **Practice (Mock) Exam Paper (1)**

for

**OCR A Level Economics**

### **Paper 1**

### **Microeconomics**

Practice (Mock) Exam Paper  
Detailed Mark Schemes  
Example Model Answers

**Minimising Workloads, Maximising Performance**

## **FOREWORD: Important - Read First**

This resource contains 1 of 4 Practice (Mock) Examination Papers for OCR's A Level Economics **Paper 1** examination, entitled '**Microeconomics**'. The full set of 4 papers can be purchased from APT's website: [www.appt-initiatives.com](http://www.appt-initiatives.com), or individually from the TES website: [www.tes.com/teaching-resources](http://www.tes.com/teaching-resources).

The full set of 4 question papers have been written to include questions that **test as many areas listed in the specification subject content** (published in 2016, for first examination in 2017) - **relating to Component 1 on Microeconomics - as possible**. An overview of Economics topics / concepts tested in in this particular paper is provided immediately after this 'Foreword' and before the question paper (on page iii below).

Question papers, mark schemes and answers have been written taking into account the **sample assessment material (SAM) for A Level Paper 1** published by OCR for the launch of the **new A Level Economics specification (from 2015)**, as well as the **first paper** (sat in June 2017) for this exam. The structure, style and format of APT's question papers and mark schemes are in line with these papers.

Each question paper contains **three** sections, with students being required to **answer all questions in Section A**, **one** question from a choice of two in **Section B**, and **one** question from a choice of two in **Section C**.

Section A comprises a range of **short-answer data response** questions. Both Section B and Section C comprise a choice of **extended open-response** questions (with students selecting **one from two**).

Time to complete each paper is **2 hours** (ie 120 minutes), and there are **80 marks** available.

The questions included in each paper **ensure students gain appropriate exam practice across OCR's four A Level assessment objectives (AO)** (see below), as detailed on p.30 of the OCR Specification. (Refer to the 'Assessment Objective Grid' at the end of each APT mark scheme).

<i>Learners are expected to:</i>	
AO1	<b>Demonstrate knowledge</b> of terms / concepts and theories / models to show an <b>understanding</b> of the behaviour of economic agents and how they are affected by and respond to economic issues.
AO2	<b>Apply</b> knowledge and understanding to various economic contexts to show how economic agents are affected by and respond to economic issues.
AO3	<b>Analyse</b> issues within economics, showing an understanding of their impact on economic agents.
AO4	<b>Evaluate</b> economic arguments and use qualitative and quantitative evidence to support informed judgements relating to economic issues.

In the Paper 1 examination, for higher mark questions (8+ marks) OCR applies the following Levels of Response (as detailed on p.5 of the OCR A Level Economics SAM Mark Scheme published 2016, for first examination in 2017):

Level	Knowledge & Understanding / Application	Analysis	Evaluation
<b>Strong</b>		An explanation of causes and consequences, fully developing the links in the chain of argument.	A conclusion is drawn weighing up both sides, and reaches a supported judgement.

<b>Good</b>	Precision in the use of the terms in the question and applied in a focused way to the context of the question.	An explanation of causes and consequences, developing most of the links in the chain of argument.	A conclusion is drawn weighing up both sides, but without reaching a supported judgement.
<b>Reasonable</b>	Awareness of the meaning of the terms in the question and applied to the context of the question.	An explanation of causes and consequences, which omit some key links in the chain of argument.	Some attempt to come to a conclusion, which shows some recognition of the influencing factors.
<b>Limited</b>	Awareness of the meaning of the terms in the question (no application).	Simple statement(s) of cause and consequence.	An unsupported assertion.

In line with page 35 of the specification (published in 2016, for first examination in 2017), each paper also tests students' application of **quantitative skills** in the context of the subject content. This includes at least Level 2 mathematical skills and a minimum of 20% of the overall marks per paper. These skills are assessed across the assessment objectives. (Refer to the 'Assessment Objective Grid' at the end of each APT mark scheme).

The question papers provide **space for students to write down their answers** in line with the SAM and first actual (2017) exam paper for A Level Paper 1.

For **questions worth 8 or more marks** (where 'level descriptors' are used to mark students' answers) example model answers are provided in **paragraph form**, rather than a list of relevant points anticipated to be raised in the answer.

To provide more support to teachers and their students, answers have also been **annotated throughout to show where individual assessment objectives (AO) are demonstrated** - with 'Kn' for knowledge and understanding, 'Ap' for application (to the context provided in the question), 'An' for analysis and 'Ev' for evaluation. Although it is possible to demonstrate more than one AO in one sentence, points made in answers are **generally** annotated to highlight the **main AO demonstrated**, although, on occasions, more than one is highlighted. With regard to these annotations, it should also be appreciated that there is always scope for differences in interpretation of answers in relation to mark schemes, even between experienced examiners.

Answers to **questions worth 8 or more marks** typically contain **a range of examples of comments which attract a mark**. As a result, some of the answers presented may seem a little long, given the time available. However, the total answer may attract **multiple annotations which go well beyond the maximum mark available** for that particular question. Hence, there is scope to cut such answers down, without losing their integrity and coherence, and still secure the maximum marks.

Finally, it should be appreciated that, with the exception of answers to calculation questions, answers should not be seen as exhaustive - **any valid response should be given due credit**. Mark schemes and answers should, ultimately, be seen as **a set of guidelines**, not rigid performance criteria.

To conclude, whilst every effort has been made to provide appropriate question papers, as well as mark schemes and answers for the questions posed, these question papers, mark schemes and answers are intended as **an aid to the teacher** who must retain full responsibility for checking up-to-date specification requirements and exam board assessment material, and the final delivery of subject matter to students. In this context, APT is always available to discuss any aspect of the question papers, mark schemes and answers, should the teacher wish to discuss APT's interpretation.

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These Practice (Mock) Exam Papers for Paper 1 (on Microeconomics) are one of several resources produced by **APT Initiatives Ltd** to support teachers and students taking **OCR A Level Economics**. Practice Papers have also been written for Paper 2 (on Macroeconomics) and Paper 3 (on Themes in Economics). Further information on each of these resources, as well as other resources for Business and Economics qualifications, is available on APT's website: [www.apr-initiatives.com](http://www.apr-initiatives.com).

**APT Initiatives Ltd** can be contacted directly with any orders, queries or feedback via the website: [www.apr-initiatives.com](http://www.apr-initiatives.com), via email: [support@apr-initiatives.com](mailto:support@apr-initiatives.com) or by phone: 01952 540877.

## **Overview of Economics Topics / Concepts Tested**

The grid below shows the Economics topics / concepts tested in the practice paper contained in this resource, by which question in the paper. Note: This grid should not be used as a source of reference of all the subject content that candidates are required to study for OCR A Level Economics (Component 1), as it contains information relating to only part of this subject content, and this subject content is also liable to frequent review. **Such information should be obtained directly from the OCR website, where the most current versions of OCR specifications are placed.**

<b>Subject Content</b>	<b>Q No.</b>
<b>SCARCITY and CHOICE</b>	
<b>The market economy</b>	
Evaluate the role of government within the market economy.	1e
<b>Opportunity cost</b>	
Explain the concept of opportunity cost	2
Explain what is meant by a 'trade-off'	2
<b>Specialisation and trade</b>	
Explain what is meant by specialisation and the division of labour	4
<b>HOW COMPETITIVE MARKETS WORK</b>	
<b>Allocation of resources</b>	
Evaluate the effectiveness of incentives on the behaviour of economic agents and resource allocation	2
<b>The objectives of economic agents</b>	
Identify possible objectives of economic agents	1e
<b>Supply and demand and the interaction of markets</b>	
Explain the factors which cause a shift of the demand curve	2
Explain, with the aid of a diagram, what is meant by consumer surplus	1e, 2
Explain and calculate how changes in price affect consumer surplus	1e, 2
Evaluate the impact of changes in price on consumer surplus	1e, 2
Explain the relationship between price and quantity supplied	1b, 2
Explain the factors which cause a shift of the supply curve	1b, 2
Explain the causes and consequences of disequilibrium in a market	2
Explain, with the aid of a diagram, how changes in the factors affecting supply and demand will impact on equilibrium price and quantity in moving from an initial equilibrium to a new equilibrium	1b, 2, 3
Evaluate, with the aid of a diagram, the usefulness of demand and supply in analysing markets, such as commodities, housing and transport	3
<b>Elasticity</b>	
Explain what is meant by price elasticity of demand (PED)	2
Explain, with the aid of a diagram, the relationship between PED and a firm's total revenue	2
Evaluate the effect of PED on the impact of an indirect tax and of a subsidy	2
<b>Productive and allocative efficiency</b>	
Explain what is meant by productive efficiency	1e
Explain what is meant by allocative efficiency	1e
Explain what is meant by economic efficiency	1e, 2
Distinguish between static and dynamic efficiency	1e
Explain what is meant by x-inefficiency	1d
Explain the conditions under which productive and allocative efficiency can be achieved	1e
Evaluate whether other market structures may not always lead to productive and allocative efficiency	1e
Evaluate the importance of productive, allocative and dynamic efficiency.	1e

<b>COMPETITION AND MARKET POWER</b>	
<b>Business objectives</b>	
Evaluate the assumptions underlying profit maximisation as a business objective	1e
Evaluate the relevance of profit maximisation to businesses	1e 3
Evaluate alternative maximisation objectives for businesses to profit maximisation, including sales revenue maximisation, sales volume maximisation, growth maximisation and utility maximisation	1e
Evaluate the factors which influence the choice of objectives.	1e
<b>Market structures and their implications for the way resources are allocated and the independence of firms</b>	
Explain: total cost (TC), total fixed cost (TFC), total variable cost (TVC), average cost / average total cost (AC/ATC), average fixed cost (AFC), average variable cost (AVC), marginal cost (MC)	2, 5
Explain what is meant by internal and external economies and diseconomies of scale	4
Evaluate the causes of internal and external economies and diseconomies of scale	4
Evaluate the significance of economies and diseconomies of scale to businesses and other economic agents	4, 5
Explain what is meant by the minimum efficient scale (MES)	4
Evaluate the importance of MES	4
Explain the characteristics of monopoly	1e
Explain, with the aid of a diagram, why a monopolist is a price maker	1e
Explain, with the aid of a diagram, the equilibrium price and output for a profit maximising monopolist	1e
Explain, with the aid of a diagram, why the profit maximising monopolist may be neither allocatively nor productively efficient	1e
Evaluate, with the aid of a diagram, the advantages and disadvantages of monopoly power	1e
Explain and calculate concentration ratios	1c
Explain barriers to entry and exit	4, 5
Explain the characteristics of a perfectly contestable market	5
Explain what it meant by horizontal, vertical and conglomerate integration / merger	1a
Evaluate the advantages and disadvantages of integration to economic agents	1d
Evaluate the factors which influence the growth of firms	1d
Evaluate the impact of regulation and ownership on the behaviour of firms	1e
Evaluate the impact of competition policy on the behaviour of firms	1d
Evaluate the extent to which firms are interdependent.	1d
<b>LABOUR MARKET</b>	
<b>Labour market issues and themes</b>	
Evaluate, with the aid of a diagram, the impact of the imposition of and changes in maximum wages, minimum wages and the 'living wage'	3
evaluate the impact of the imposition of, and changes in, maximum wages, minimum wages and the 'living wage'	3
evaluate the impact of individual bargaining, collective bargaining, productivity bargaining and trade union activity on labour markets	3
<b>Government intervention</b>	
Explain what is meant by income inequality	3
Evaluate the impact of the introduction and changes in government intervention in the labour market, including: pensions, migration, education and training, UK and EU legislation and regulation, participation ages, tax and benefit system.	3

<b>MARKET FAILURE AND GOVERNMENT INTERVENTION</b>	
<b>Externalities</b>	
Explain, with the aid of a diagram, what is meant by positive and negative externalities (external benefits and external costs) of consumption	2
Explain what is meant by marginal social cost, marginal external cost, marginal private cost, marginal social benefit, marginal external benefit and marginal private benefit	2
Explain, with the aid of a diagram, why the following cause market failure: negative externalities of consumption; negative externalities of production; positive externalities of consumption; positive externalities of production	2
Evaluate how the existence of externalities affects markets, such as education, health, transport and the environment.	2
<b>Alternative methods of government intervention</b>	
Explain why governments intervene in markets	1e
Explain, with the aid of a diagram, how government intervention in markets corrects or reduces market failure and inequity by using, for example: taxation and subsidies; government expenditure / state provision; buffer stock systems; price controls; public / private partnerships; legislation and regulation; tradeable pollution permits; information provision; competition policy	1e, 2
Evaluate the effectiveness of different types of government intervention in correcting or reducing market failure and inequity	2
<b>Government failure</b>	
Explain what may cause government failure	2 3

# APT Initiatives Ltd: **Practice Paper (1)** for **OCR**

Oxford Cambridge and RSA

## **A Level in Economics** **H460/01 Microeconomics**

Time allowed: 2 hours

**You may use:**  
a scientific calculator

<b>First name</b>	
<b>Last name</b>	

### **INSTRUCTIONS**

- Use black ink. You may use an HB pencil for graphs and diagrams.
- Complete the boxes above with your name. (Your centre number and candidate number will also be required in the actual exam).
- Read each question carefully before you start to write your answer.
- Section A: Answer **all** questions in this section.
- Sections B and C: Answer **one** question in each of these sections.
- Write your answer to each question in the space provided.
- Additional paper may be used if required. (In the actual exam you must clearly show your candidate number, centre number and question number on this additional paper).

### **INFORMATION**

- The total mark for this paper is **80**.
- The marks for each question are shown in brackets [ ] - *use this as a guide as to how much time to spend on each question. (Note: You have approximately 1 minute per mark - allowing some time to read through the stimulus material in Section A, the questions and your answers).*
- Quality of extended responses will be assessed in questions marked with an asterisk (\*).

**SECTION A**

Read the following stimulus material and answer **all** parts of question 1 which follow in this section.

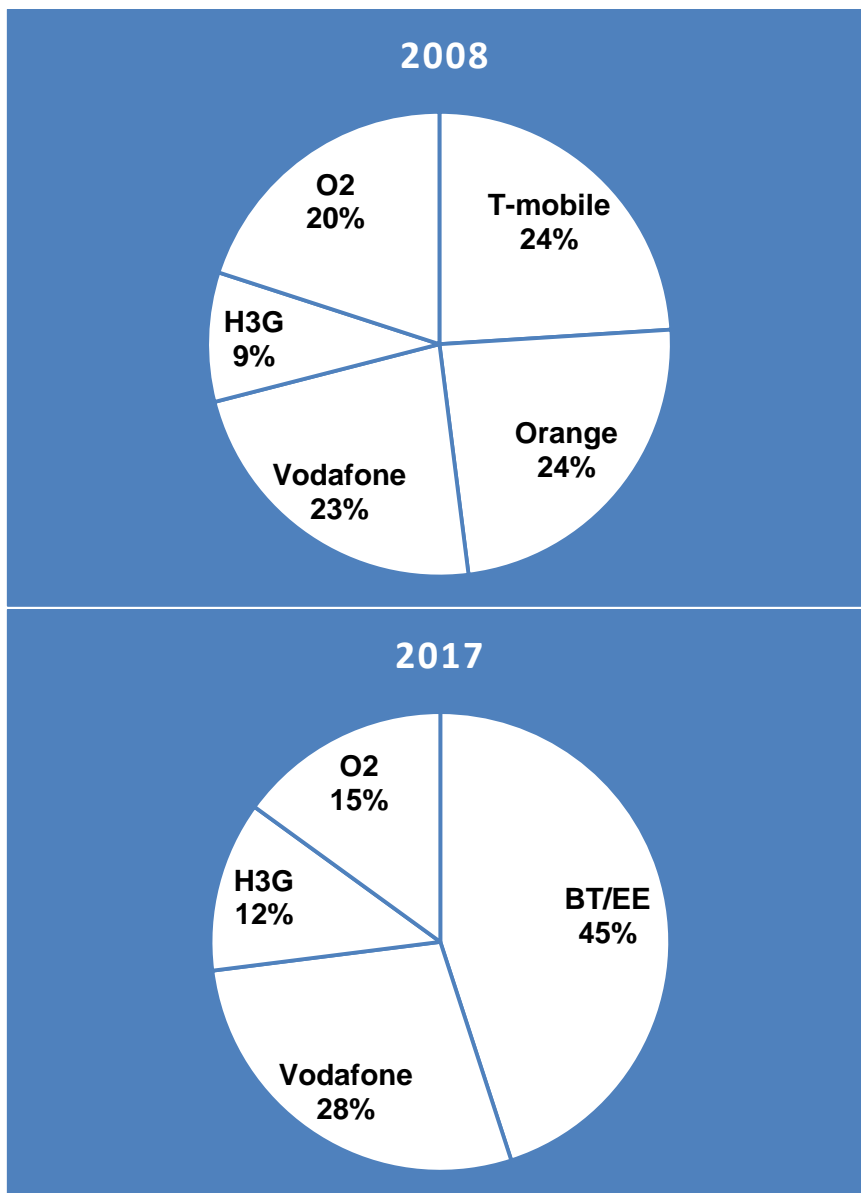
**Developments in the communications, grocery and technology markets**

On Friday 6<sup>th</sup> August 2016, BTEE became the dominant network operator in the UK mobile communications industry after the £12.5bn merger of BT with Everything, Everywhere (EE).

BTEE's commanding position is by some distance too, (see Figure 1) and that's a big problem for Ofcom, the industry watchdog. It must balance encouraging competition without stripping the incentives for operators to invest in the networks.

5

**Fig. 1 - Mobile communications network (spectrum) market share 2008 and 2017**



Adapted from: 'New Spectrum Auction, UK Mobile in 4 charts', February 17<sup>th</sup> 2017, Stephen Frazer, Shares Magazine, <https://www.sharesmagazine.co.uk/news/shares/new-spectrum-auction-uk-mobile-in-4-charts>, (accessed August 2017)



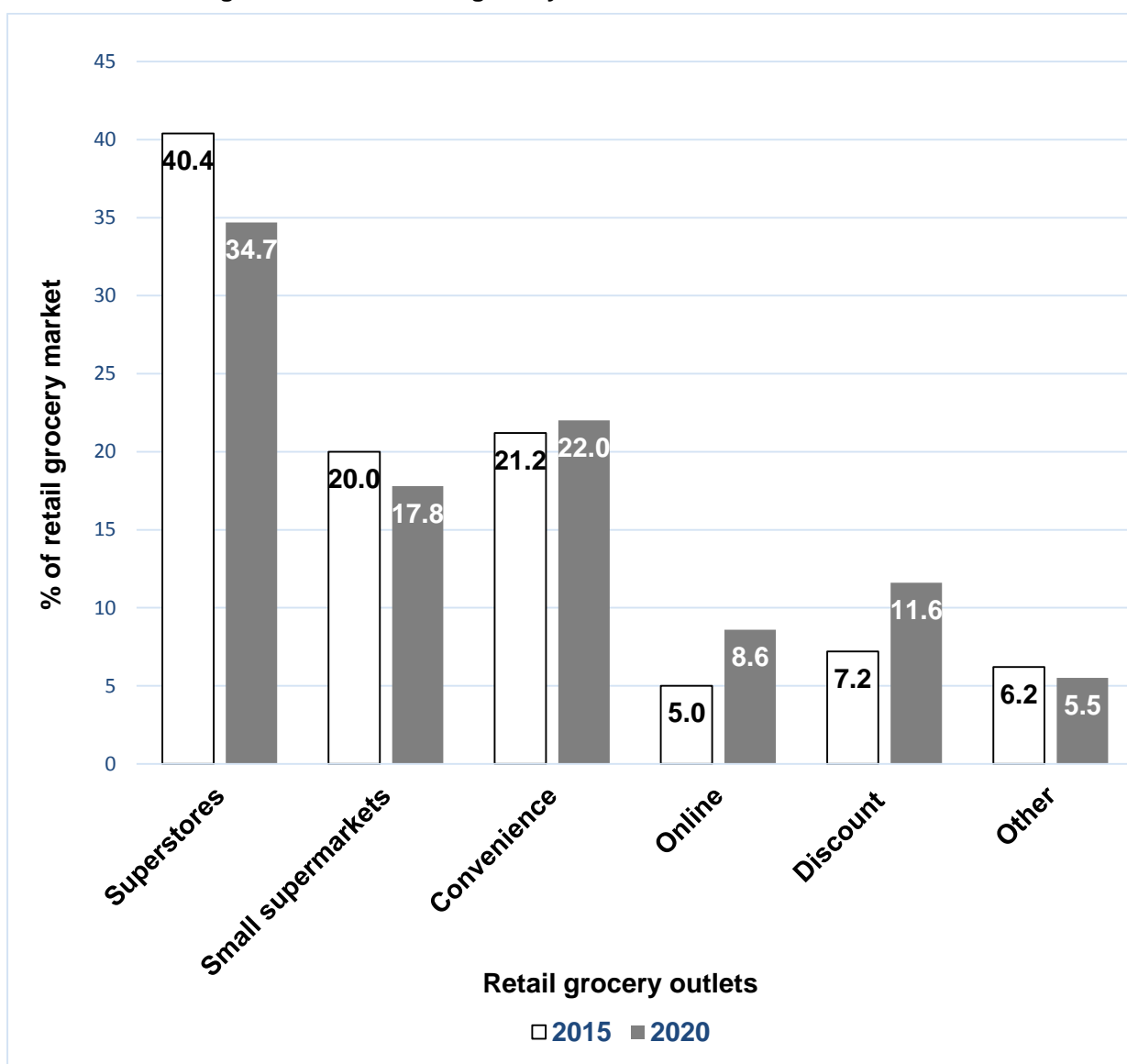
Since BT sealed its merger with EE it has kept the mobile phone company at arm's length from its established consumer business. However, in May 2017, Marc Allera, chief executive of EE, said that while keeping the two businesses separate has proved the right approach so far, that will change.

10 With EE expected to grow further, analysts believe a full merger of EE and BT Consumer is inevitable. Paolo Pescatore, an analyst at CCS Insight, said BT "still needs to make some decisions as to the future viability of managing two competing but significantly overlapping lines of business.

15 On Friday, June 14<sup>th</sup>, 2017, Amazon announced the \$13 billion purchase of Whole Foods Market, the sixth-largest grocery store in the USA. Later that same day Amazon's share price had risen by around 3 percent, adding over \$14 billion to its value. Investor confidence in Amazon's future growth meant it was basically able to buy the sixth-largest grocery retailer in the USA for free.

Jeff Bezos, Amazon's president and CEO, has made several previous grabs at the retail grocery market. In June 2016, Amazon Fresh was launched in the UK where customers in London were, for the first time, able to order a full weekly shop and get it delivered to their home on the same day.

**Fig. 2 - Growth of retail grocery outlets estimated 2015 to 2020**

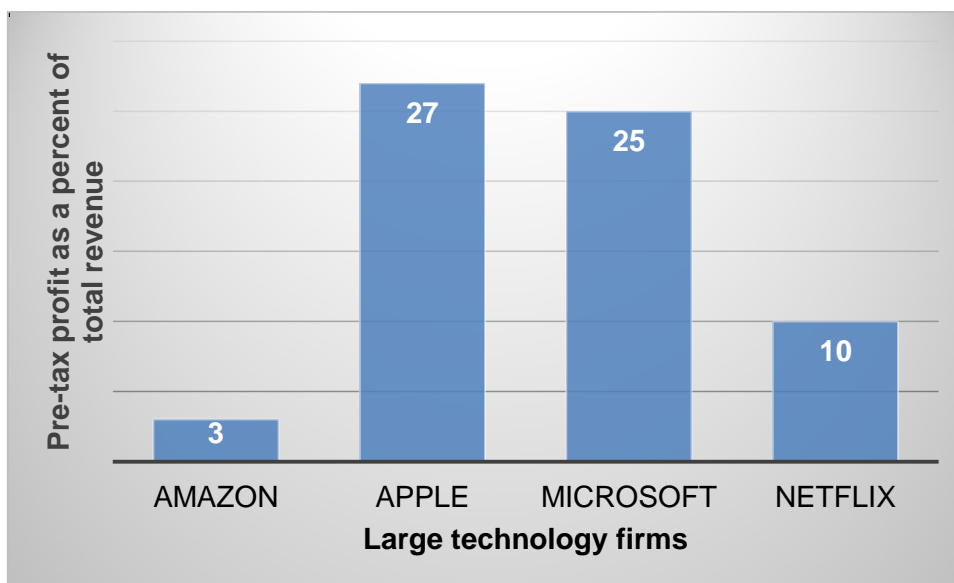


Source: 'The growth potential of online grocery' Henry, V., IGD, July 14 2015, <http://www.igd.com/Research/Shopper-Insight/The-growth-potential-of-online-grocery/>, (accessed August 2017)

Amazon runs on thin margins. Between 2016 and 2017 it experienced an increase in revenue from \$29.1 billion to \$35.7 billion. Despite this, there was a slight reduction in its pre-tax profit, from \$1.1 to \$1.0 billion. One of Amazon's largest cost centres over this period was 'technology and content'. Amazon reported as follows, about this cost centre in its 2017 Q1 report: *We seek to invest efficiently in several areas of technology and content so we may continue to enhance the customer experience and improve our process efficiency through rapid technology developments while operating at an ever increasing scale.*

Technology and content are Amazon's growth engine. When you think of Amazon reinvesting in its business, this is where you should look. Amazon's management is fine with lower reported profits, as long as its investments yield future growth.

**Fig. 3 - Profitability of large technology firms 2017 (Q1)**



Adapted from: 'How profitable was Amazon in 2017 Q1? STEM to Business', May 2017, <http://www.stemtobusiness.com/profitable-amazon-2017-q1/>, (accessed August 2017)

In relation to the e-book market, Amazon is seen by some as operating a monopoly, retailing 9 out of 10 digital books sold in the UK. Traditional economic theory predicts that a monopoly will charge a higher price whilst restricting both output and quality to below the level of a competitive market.

However, there are many economists who do not regard the activity of Amazon as damaging or even that of a monopolist. They argue that what is being described is the normal actions of a big, well-funded firm in a spirited market.

Moreover, Amazon relentlessly drives down prices for goods and services and delivers its products quickly. Amazon ploughs its profits into price cuts and technology and content innovation rather than putting them in the hands of its investors. This results in benefits for millions of its consumers.

Some are calling for new tighter regulation to curb the activities of Amazon. Others argue that to call for Amazon to be stopped because it has found a way to give consumers what they want is to misunderstand the nature of capitalism.

Adapted from: <https://www.theguardian.com/technology/2012/oct/21/amazon-forces-publishers-pay-vat-ebook>; 'BT set to bring EE within consumer group', May 30<sup>th</sup> 2017, Nic Fildes, The Financial Times, <https://www.ft.com/content/7b7b6b52-3c8f-11e7-ac89-b01cc67cfeec>; 'When Does Amazon Become a Monopoly?', June 16<sup>th</sup> 2017, Mike Segar, The Atlantic, <https://www.theatlantic.com/technology/archive/2017/06/when-exactly-does-amazon-become-a-monopoly/530616/>; 'Amazon: Monopoly or capitalist success story?', October 14 2014, BBC Business, <http://www.bbc.co.uk/news/blogs-echochambers-29606207>; 'How profitable was Amazon in 2017 Q1?', May 2017, STEM to Business, <http://www.stemtobusiness.com/profitable-amazon-2017-q1/>, (accessed August 2017)











**SECTION B**

Answer **EITHER** question **2** **OR** question **3**.

**EITHER**

- 2\*** Expenditure on local public transport in the United Kingdom fell from £2.893 billion to £2.329 billion between 2011/2 and 2016/7.

Evaluate, using an appropriate diagram(s), the extent to which a case can be made for subsidising producers of goods or services that generate positive externalities in consumption. **[25]**

**OR**

- 3\*** The Conservative party fought hard against the National Minimum Wage when it was first introduced by the Blair Labour government in the UK, in 1998. However, in the 2017 General election Theresa May committed to increase the National Living Wage in the UK to £9 an hour by 2020.

Evaluate, using an appropriate diagram(s), the impact of an increase in the National Minimum Wage on income inequality in the UK. **[25]**

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**SECTION C**

Answer **EITHER** question 4 **OR** question 5.

**EITHER**

- 4\* In July 2016, in the Republic of Ireland it was reported that an additional 97,000 people joined private medical healthcare schemes, bringing the total insured in the Republic to 2.12 million or 46% of the population.

Evaluate the extent to which firms involved in the provision of private medical healthcare are likely to benefit from economies of scale, as a result of the growth in the sector. **[25]**

**OR**

- 5\* Barriers to entry in the market for large commercial jet aircraft are extremely high and will prove a challenge to China's state-run aircraft manufacturer, Comac, which is attempting to break into this market.

Evaluate the extent to which barriers to entry might determine the degree to which the market for large commercial jet aircraft is contestable. **[25]**

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**ADDITIONAL ANSWER SPACE**

If additional space is required, you should use the following lined page(s). The question number(s) must be clearly shown in the margin(s).

A large area of lined paper for writing answers. It features a vertical solid line on the left side, creating a margin. The rest of the page is filled with horizontal dotted lines, providing a guide for writing. The lines are evenly spaced and extend across the width of the page.



The page contains a large area of horizontal dotted lines for writing. A solid vertical line is positioned on the left side of this area, approximately one-tenth of the way across the page from the left margin. The dotted lines extend from the right margin to the solid vertical line, creating a column for writing.

The page contains a large area of horizontal dotted lines for writing. A solid vertical line is positioned on the left side of this area, approximately one-tenth of the way across the page from the left margin. The dotted lines extend from the right margin to the solid vertical line, creating a column for writing.

**Mark Schemes & Example Model Answers**

**PRACTICE PAPER 1**

Remember: For higher mark questions (8+ marks) OCR applies the following Levels of Response - Level Descriptor Grid.

<b>Level</b>	<b>Knowledge &amp; Understanding / Application</b>	<b>Analysis</b>	<b>Evaluation</b>
<b>Strong</b>		An explanation of causes and consequences, fully developing the links in the chain of argument.	A conclusion is drawn weighing up both sides, and reaches a supported judgement.
<b>Good</b>	Precision in the use of the terms in the question and applied in a focused way to the context of the question.	An explanation of causes and consequences, developing most of the links in the chain of argument.	A conclusion is drawn weighing up both sides, but without reaching a supported judgement.
<b>Reasonable</b>	Awareness of the meaning of the terms in the question and applied to the context of the question.	An explanation of causes and consequences, which omit some key links in the chain of argument.	Some attempt to come to a conclusion, which shows some recognition of the influencing factors.
<b>Limited</b>	Awareness of the meaning of the terms in the question (no application).	Simple statement(s) of cause and consequence.	An unsupported assertion.

OCR A Level Economics SAM Mark Scheme, p.5 (published 2016, for first examination in 2017)

With the exception of answers to calculation questions, answers should not be seen as exhaustive - any valid response should be given due credit. Mark schemes and answers should, ultimately, be seen as a set of guidelines, not rigid performance criteria.

**SECTION A**

**1 (a) Identify one piece of evidence in the stimulus material of horizontal integration in the mobile communications market and explain why it is an example of horizontal integration. [2] (AO2 x 2)**

**Suggested mark allocation:**

One mark for the identification of a piece of evidence.

One mark for an explanation of why it is an example of horizontal integration.

**Example model answer:**

The stimulus material refers to the merger of two mobile communications providers, namely BT and Everything, Everywhere (EE). (1) This is an example of horizontal integration because it represents a merger between two firms (BT and EE) in the same industry operating at the same stage in the chain of production. (1)

**(b) Explain, using a demand and supply diagram, the impact on price and quantity, of the addition of Amazon Fresh to the online retail grocery market. [4] (AO1 x 2, AO2 x 2)**

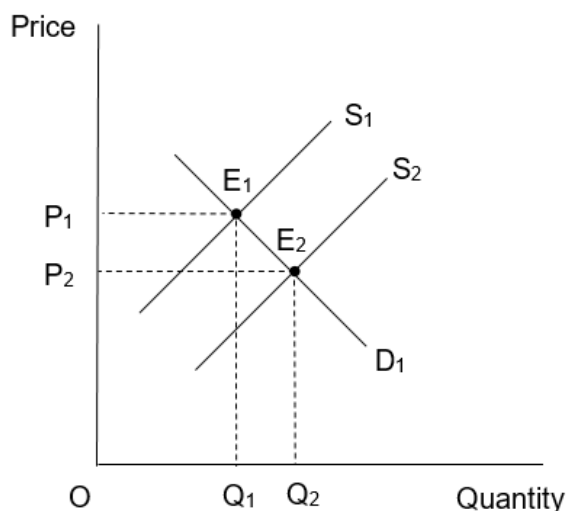
**Suggested mark allocation:** Up to four marks:

Up to two marks for a correct and relevant diagram. (One mark for a relevant diagram with some omissions(s) or errors).

Up to two marks for an explanation.

**Example model answer:**

The initial equilibrium in the online retail grocery market is shown as  $E_1$  in the diagram below with price at  $P_1$  and quantity at  $Q_1$ . (2)



The addition of Amazon Fresh to the market creates an increase in supply which is represented by a rightward shift (increase) in the supply curve from  $S_1$  to  $S_2$ . (1) This results in a new equilibrium ( $E_2$ ) on the diagram, with a lower price of  $P_2$ , and an increase in the quantity traded from  $Q_1$  to  $Q_2$ . (1)

**(c) Explain, using relevant calculations, whether the mobile communications market was more concentrated or less concentrated in 2008 than in 2017. [4] (AO1 x 2, AO2 x 2)**

**Suggested mark allocation:** Up to four marks:

One mark for recognising that it was less concentrated in 2008 than in 2017; One mark for explaining that this was because the three-firm market concentration ratio was lower / the three largest firms accounted for a smaller % share of total sales in 2008 than in 2017; One mark for supporting evidence from 2008, using a correct calculation of 2008 concentration ratio; One mark for supporting evidence from 2017, using a correct calculation of 2017 concentration ratio.

**Example model answer:**

The three-firm market concentration ratio was 71% in 2008 (24% + 24% + 23%) (1), and in 2017 it was 88% (45% + 28% + 15%). (1) Therefore, the three-firm market concentration ratio was lower in 2008 than in 2017. (1) This means that the mobile communications market was less concentrated in 2008 than in 2017. (1)

**(d) Following announcements from BT in 2016, analysts believe a full merger of EE and BT Consumer is inevitable.**

**Evaluate the extent to which merging two competing firms with significantly overlapping lines of business is likely to bring advantages other than economies of scale to a firm such as BT. [8] (AO1 x 1, AO2 x 1, AO3 x 3, AO4 x 3)**

**Level 2 (5-8 marks):**

- **Good** knowledge and understanding / application of advantages (other than economies of scale) of merging two competing firms with significantly overlapping lines of business.
- **Strong** analysis of the advantages (other than economies of scale) of merging two competing firms with significantly overlapping lines of business.
- **Strong** evaluation including a supported judgement on the extent to which merging two competing firms with significantly overlapping lines of business is likely to bring advantages other than economies of scale to a firm such as BT.

**Level 1 (1-4 marks):**

- **Reasonable** knowledge and understanding of the advantages (other than economies of scale) of mergers.
- **Reasonable** analysis of the advantages (other than economies of scale) of merging two competing firms with significantly overlapping lines of business.
- **Limited or no** evaluation of the extent to which merging two competing firms with significantly overlapping lines of business is likely to bring advantages other than economies of scale to a firm such as BT.

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

**Example model answer:**

The takeover by BT of Everything Everywhere (EE) in 2016, is an example of horizontal integration and has been undertaken in order to secure a market advantage. (Kn/AP) The two original firms had significantly overlapping lines of business. This means that the new, larger BT/EE operation will enjoy advantages arising from the streamlining of duplicated tasks between the firms, beyond the economies of scale arising from organic growth. (Kn/AP) This will result in cost savings for the new firm, (An) for example, arising from the significant reduction in staffing levels, which will cut salary and wage costs. (An)

A further significant advantage to BT of merging with a firm that has significantly overlapping lines of business is the immediate increase in market share, (Kn/AP) This will result in greater market power through, for example, greater control over prices (within the constraints of competition law). (An) It will also reduce the risks associated with a more competitive environment, (An) as well as reduce the time and money that BT needs to spend on tackling the competition. (An) This will allow the new merged firm to use the combined resources of both firms to focus on developing better products and services, than would otherwise be the case, from the larger joint operation, (An) and this should, ultimately, lead to further growth, (An) a more secure market share, (An) and more sustainable profits. (An)

The extent to which the merger will bring advantages to BT will depend upon a number of factors...

If BT is to benefit promptly and significantly from higher profits as a result of reduced costs, the streamlining of the duplicated tasks within BT and EE must be quick and well-managed. (Ev) With regard to this, in May 2017, Marc Allera, chief executive of EE, claimed that keeping the two businesses separate had proved the right approach in the short run. (*Continued...*)

However, if the duplicated tasks are allowed to continue for too long, this will lead to X-inefficiency and a resulting loss of profit. (An, Ev) Moreover, the merger will necessarily involve the integration of the two distinct 'cultures' of BT and EE which, unless addressed quickly, could cause operational bottlenecks. (Ev) This is particularly the case when a large and successful firm, such as EE, has an operational culture that clearly has its own strengths, but this firm is essentially new, and these strengths may be incompatible with those of the other firm involved in the merger. (Ev)

Finally, when one mobile communications firm expands by merging with another with significantly overlapping lines of business, the merger may result in the new, larger company operating with relatively fewer products (Ap) and, therefore, a reduced scope for successful new product development. (An) This implies that if the mobile communications market suffers a downturn then, with limited potential for diversification, the new firm could suffer disproportionality compared to the consequences associated with a conventional, organic growth strategy, with greater scope associated with one large business. (An, Ev)

**(e)\* Using evidence from the stimulus material, evaluate the extent to which there are disadvantages of a firm such as Amazon operating with monopoly power. [12] (AO1 x 1, AO2 x 1, AO3 x 5, AO4 x 5)**

**Level 3 (9-12 marks):**

- **Good** knowledge and understanding / application of the disadvantages of monopoly power.
- **Strong** analysis of the disadvantages of a firm such as Amazon operating with monopoly power.
- **Strong** evaluation including a supported judgement on the extent to which there are disadvantages of a firm such as Amazon operating with monopoly power.
- **QWC:** *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 / application of the disadvantages of monopoly power.
- **Good** analysis of the disadvantages of a firm such as Amazon operating with monopoly power.
- **Reasonable** evaluation of the extent to which there are disadvantages of a firm such as Amazon operating with monopoly power.
- **QWC:** *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** knowledge and understanding of monopoly power.
- **Reasonable** analysis of the disadvantages of a firm such as Amazon operating with monopoly power.
- **Limited or no** evaluation of the extent to which there are disadvantages of a firm such as Amazon operating with monopoly power.

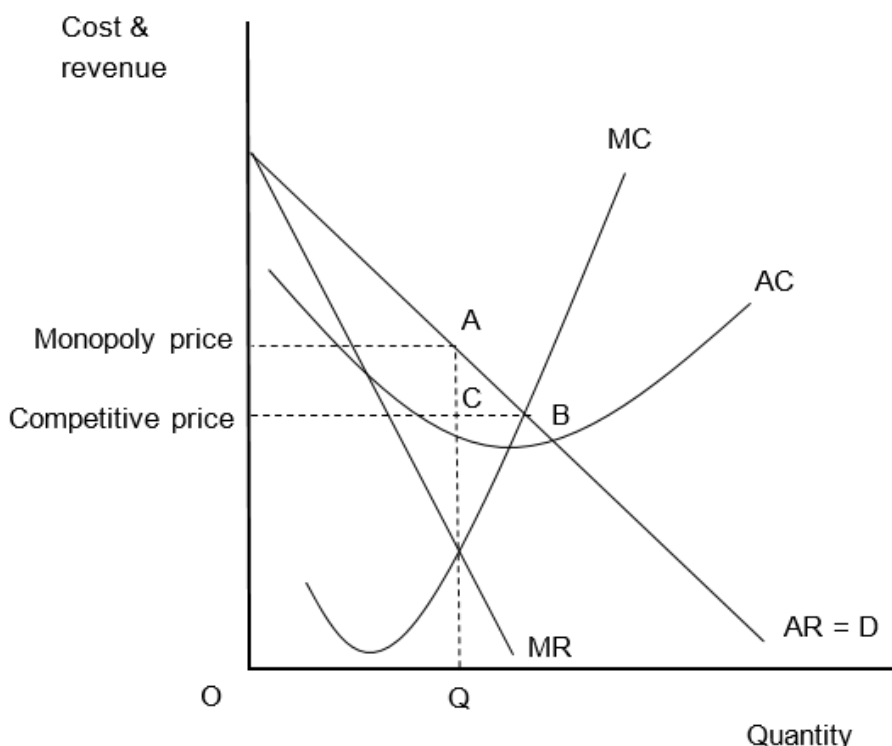
**0 marks:** no response or no response worthy of credit.

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

**Example model answer:**

The traditional definition of a monopolistic market structure refers to the monopolist being a single seller in a market, or in practice being responsible for over 25% of the market. (Kn) In a monopolistic market structure, there are also insurmountable barriers to entry, (Kn) and the firm is a price maker, (Kn) securing long-run supernormal profits from the market. (Kn)

As a profit maximising monopolist in the e-books market, where Amazon is reckoned to supply 9 out of 10 of all e-books sold, their price and output decisions in this market can be illustrated in the diagram below. (Kn, Ap)



As illustrated above, assuming the monopolist wishes to profit maximise, its price will be relatively high compared to the competitive price, because of the strength of Amazon's market power. (Ap, An)

With respect to output and sales, the monopolist's profit maximising level, at this price, would be restricted and relatively low at Q. (An)

The monopoly market structure would also lack both productive and allocative efficiency. (Ap) This is because the monopolist would neither produce at the minimum of their average cost curve, meaning they were not productively efficient, nor would the price the monopolist charges (AR) equal the marginal cost (MC) of the output they produced. (Ap, An)

It is because of the potentially high price charged, the lower output demanded and produced at that price, the lack of efficiencies achieved, and the potential for exploitative price discrimination, that monopolistic firms, such as Amazon, are anticipated to generate significant and undesirable economic disadvantages. (Ap, An)

However, there are several advantages for a firm, such as Amazon, operating with monopoly power. These are considered below.

In practice, although Amazon has a monopoly in the e-books market (based on the 25% rule), the price that Amazon chooses to charge is closer to the competitive price in the diagram. (Ap) This is below the monopoly price represented by the distance A – C. (Ap) This moves the market towards achieving allocative efficiency, because the lower price (AR) charged by Amazon is more likely to approach the marginal cost (MC) of Amazon's production, at point B, with greater output demanded and produced at this price. (Ap, An) In this sense, there is an advantage (as opposed to disadvantage), which is substantial to the wider economy in terms of the efficient resource allocation. (Ev) Consumer surplus is the difference between the total amount that consumers are willing and able to pay for a good and the total amount that they actually do pay, (Kn) and when Amazon chooses to charge a price closer to the competitive price then consumer surplus is greater than it would be with the monopoly price. (An, Ev)

According to the stimulus material, Amazon is relentless in reinvesting its super-normal profit into technology and innovation, rather than putting it (exclusively) in the hands of its investors. This decision is potentially an advantage of Amazon operating as a monopoly, because it will reduce the average costs of production in the long run, creating the dynamic efficiency which is discussed below. (Ap, An) Amazon's approach to profit distribution is likely to move the firm towards a situation of long-run productive efficiency. (An) In this way, the wider economy would benefit significantly in terms of more efficient resource allocation. (Ev)

The investment in technology and innovation by Amazon also brings dynamic efficiency in a way that is unlikely under other market structures, in which firms only enjoy smaller and short-run supernormal profit. (Ev) Dynamic efficiency is particularly advantageous to the consumer over the longer term. (Ap) This is because welfare is increased, as product development and improved quality enhance the consumer offer, with the added advantage of lower prices and, in the case of Amazon, delivery times that are shorter. (Ap, An, Ev)

To conclude, firms like Amazon can bring significant advantages to both the consumer and the wider economy, in terms of consumer surplus and economic efficiency. (Ev) However, this is more likely to happen when firms such as Amazon are effectively regulated through the potential intervention of a government organisation like the Competition and Markets Authority. (Ev)

## SECTION B

**2\* Expenditure on local public transport in the United Kingdom fell from £2.893 billion to £2.329 billion between 2011/2 and 2016/7.**

**Evaluate, using an appropriate diagram(s), the extent to which a case can be made for subsidising producers of goods or services that generate positive externalities in consumption. [25] (AO1 x 6, AO2 x 6, AO3 x 6, AO4 x 7)**

**Level 5 (21-25 marks):**

- **Good** knowledge and understanding / application of subsidies for producers of goods or services that generate positive externalities in consumption.
- **Strong** analysis of the effect of subsidies for producers of goods or services that generate positive externalities in consumption. A relevant and accurately labelled diagram is provided and is integrated into the analysis.
- **Strong** evaluation of both the case for and against subsidies for producers of goods or services that generate positive externalities in consumption, with a supported judgement being made as to the extent to which there is a case for such subsidies.
- **QWC:** *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 / application of subsidies for producers of goods or services that generate positive externalities in consumption.
- **Strong** analysis of the effect of subsidies for producers of goods or services that generate positive externalities in consumption. A relevant and accurately labelled diagram is provided and is integrated into the analysis.
- **Good** evaluation of both the case for and against subsidies for producers of goods or services that generate positive externalities in consumption, but without a judgement being made as to the extent to which there is a case for such subsidies.
- **QWC:** *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 / application of subsidies for producers of goods or services that generate positive externalities in consumption.
- **Good** analysis of the effect of subsidies for producers of goods or services that generate positive externalities in consumption. A relevant diagram is provided and is integrated into the analysis.
- **Reasonable** evaluation of both the case for and against subsidies for producers of goods or services that generate positive externalities in consumption, but without a judgement being made as to the extent to which there is a case for such subsidies.
- **QWC:** *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 / application of subsidies for producers of goods or services that generate positive externalities in consumption.
- **Reasonable** analysis of the effect of subsidies for producers of goods or services that generate positive externalities in consumption. A relevant diagram is provided but contains some errors or omissions.
- **Reasonable** evaluation of both the case for and against subsidies for producers of goods or services that generate positive externalities in consumption, but without a judgement being made as to the extent to which there is a case for such subsidies.
- **QWC:** *The information has some relevance, but is communicated in an unstructured way. The information is supported by limited evidence and the relationship to the evidence may not be clear.*

**Level 1 (1-5 marks):**

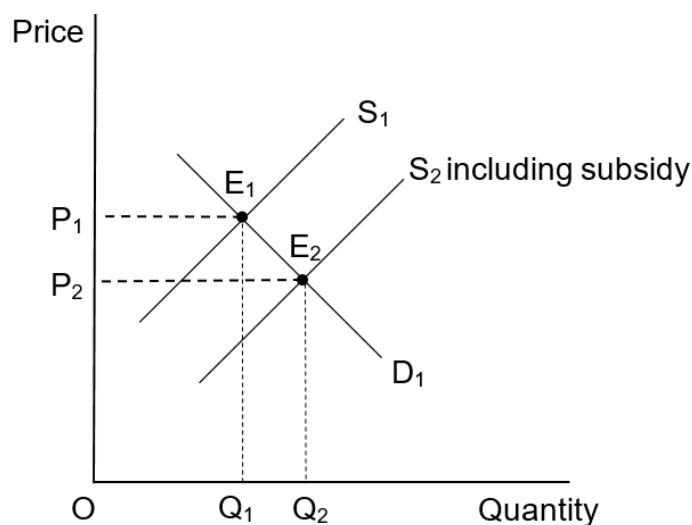
- **Reasonable** knowledge and understanding of subsidies and positive externalities in consumption.
- **Limited** analysis of the effect of subsidies for producers of goods or services that generate positive externalities in consumption. No relevant diagram provided.
- **Limited or no** evaluation.
- **QWC:** *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.

**Example model answer:**

A subsidy is a sum of money paid, usually by the state, to an industry or firm, in order to help them charge a low price for their good or service. (Kn) A positive consumption externality is said to exist when the consumption of a good results in a benefit to a third party. (Kn) It is, therefore, not unusual for a government to select and target an allocation of subsidies to encourage the consumption of goods that it deems will create positive externalities. (Kn, Ap) It is not always the case, however, that the granting of a subsidy will lead to an increase in the consumption of the goods or services to which the subsidy is targeted. (Kn, Ap)

The diagram below illustrates the likely effect of the introduction of a producer subsidy on a good with a positive consumption externality. The market is initially in equilibrium at  $E_1$  with demand  $D_1$  and supply  $S_1$ . (Kn, Ap)



The effect of the producer subsidy is to cause the supply curve to shift to the right - from  $S_1$  to  $S_2$ , with the new equilibrium at  $E_2$ . (Ap) This would be expected to cause a reduction in the equilibrium market price from  $P_1$  to  $P_2$  (An) and an increase in the equilibrium quantity traded from  $Q_1$  to  $Q_2$ . (Ap) This would lead to an increase in consumer surplus, and therefore total consumer welfare. (An)

The subsidy will provide an incentive for producers to increase their production because the subsidy has the same effect as a reduction in the costs of production. (An) This makes each unit of output more profitable for suppliers and therefore increases their willingness to supply - from  $Q_1$  to  $Q_2$ . (An)

The reduction in the price that the consumer pays as a result of the subsidy would be expected to increase the consumption and also the external benefits derived directly from consumption of the commodity. (An) This can be especially the case amongst lower-income families who are likely to spend a greater proportion of their income on a given product, such as public transport thereby increasing their economic welfare most significantly. (An, Ev)

The increase in consumption across all income groups will increase the total amount of positive externalities that consumption of the product generates. (An) As a result, this will increase more widely the welfare of all third parties in the economy. (An)

As the consumption of goods with positive externalities increases, the economy will move towards a more economically efficient level of output. (Ap) This occurs because the subsidy causes the marginal private cost of consumption to fall (An) and the marginal private benefit of consumption to increase (An) as the market moves towards the socially optimal equilibrium. (An)

The extent of this case for providing producer subsidies with respect to increasing the consumption of goods or services that generate positive externalities in consumption depends on a number of factors...

The extent of any additional consumption that occurs as a result of a fall in price will depend on the price elasticity of demand of the good in question. (Ev) The smaller the price elasticity of demand, the smaller the increase in the consumption and, therefore, the less the benefit derived from the increased positive externalities will be. This would undermine the case for such a subsidy. (Ev)

The ease and certainty with which the government can determine the optimum size of the subsidy required to achieve its policy objective will also be important in determining the case for the subsidy. (Ev) The easier it is to determine the optimum size of the subsidy, the less likely there is to be an unnecessary waste of the government's scarce resources and indeed government failure. (Ev)

The extent to which the producer passes the subsidy on to the consumer is also an important factor. (Ev) The easier it is for the producer to avoid passing the subsidy on to the consumer, typically to increase their profits, the less consumer welfare benefit there is likely to be derived from the subsidy. (Ev) This problem might arise when the producer is operating in a less competitive market.

Factors, other than price, may also be significant in determining the demand for the good in question. (Ev) If this is the case, the effectiveness of the subsidy may be called into question because the reduction in price may not be translated into effective demand, and the positive externalities would not be created. (An) This would reduce the case for such a subsidy. (Ev)

Finally, as with all such government expenditure, there is the opportunity cost of the government's scarce resources to consider. (Ev) The strength of the case for such a subsidy must be considered in relation to the benefit foregone by society through the expenditure not going to the next best alternative use by the government. (Ev)

**3\* The Conservative party fought hard against the National Minimum Wage when it was first introduced by the Blair Labour government in the UK, in 1998. However, in the 2017 budget, Theresa May's Conservative government committed itself to increase the National Minimum Wage in the UK across all age groups.**

**Evaluate, using an appropriate diagram(s), the impact of an increase in the National Minimum wage on income inequality in the UK. [25] (AO1 x 6, AO2 x 6, AO3 x 6, AO4 x 7)**

**Level 5 (21-25 marks):**

- **Good** knowledge and understanding / application of the concept of a minimum wage in relation to income inequality in the UK.
- **Strong** analysis of the impact of an increase in the National Minimum Wage on income inequality in the UK. A relevant and accurately labelled diagram is provided and is integrated into the analysis.
- **Strong** evaluation of the impact of an increase in the National Minimum Wage on income inequality in the UK, with a supported judgement being made.
- **QWC:** *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 / application of the concept of a minimum wage in relation to income inequality in the UK.
- **Strong** analysis of the impact of an increase in the National Minimum Wage on income inequality in the UK. A relevant and accurately labelled diagram is provided and is integrated into the analysis.
- **Good** evaluation of the impact of an increase in the National Minimum Wage on income inequality in the UK, but without a judgement being made.
- **QWC:** *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 / application of the concept of the minimum wage in relation to income inequality in the UK.
- **Good** analysis of the impact of an increase in the National Minimum Wage on income inequality in the UK. A relevant diagram is provided and is integrated into the analysis.
- **Reasonable** evaluation of the impact of an increase in the National Minimum Wage on income inequality in the UK, but without a judgement being made.
- **QWC:** *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 / application of the concept of a minimum wage in relation to income inequality in the UK.
- **Reasonable** analysis of the impact of an increase in the National Minimum Wage on income inequality in the UK. A relevant diagram is provided but contains some errors or omissions.
- **Reasonable** evaluation of the impact of an increase in the National Minimum Wage on income inequality in the UK, but without a judgement being made.
- **QWC:** *The information has some relevance, but is communicated in an unstructured way. The information is supported by limited evidence and the relationship to the evidence may not be clear.*

**Level 1 (1-5 marks):**

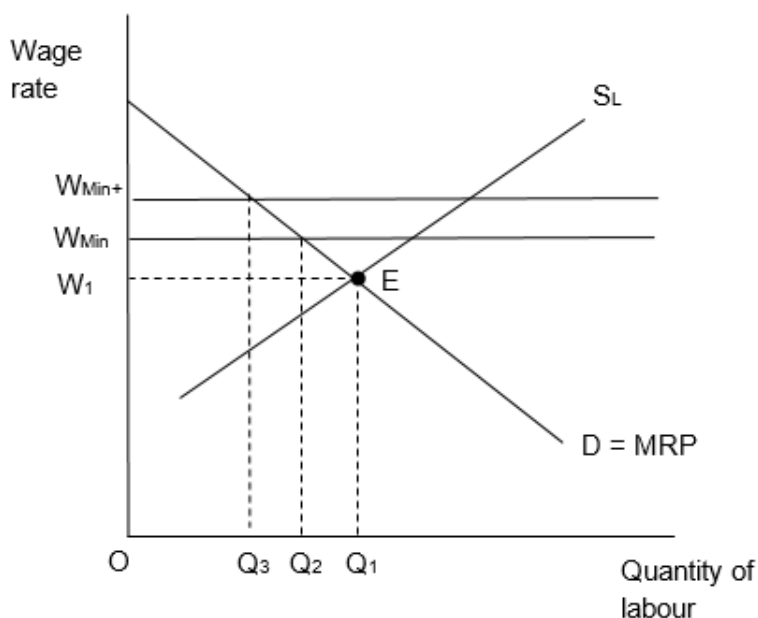
- **Reasonable** knowledge and understanding of the concept of a minimum wage and income inequality.
- **Limited** analysis of the impact of an increase in the National Minimum Wage on income inequality in the UK. No relevant diagram provided.
- **Limited or no** evaluation.
- **QWC:** *Information presented 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.

**Example model answer:**

Income inequality is the unequal distribution of household or individual income across the various participants in an economy. (Kn) The National Minimum Wage is a price floor in the labour market, which employers cannot legally undercut. (Kn) The minimum wage rate per hour is set at a different level for different age groups in the labour market (Kn) and applies both to full-time and part-time workers. (Kn) The enforcement of a minimum pay per hour that all qualifying workers are entitled to receive, (Kn) can lead to a reduction in income inequality in the UK - by increasing the income of low-paid workers. (Ap)

An increase in the National Minimum Wage will impact on some individuals in the economy who are in employment and in receipt of a relatively low income. (Ap) This impact can be shown in the following diagram of the labour market, where the demand for labour and the marginal revenue product are represented by  $D = MRP$ , and the supply of labour is represented by  $SL$ . (Kn, Ap) The market equilibrium is at  $E$  with employment at  $Q_1$  and a wage rate of  $W_1$ . (Ap)



If the minimum wage is increased - as Theresa May's government indicated in 2017 - to  $(W_{Min+})$  above the existing minimum wage rate  $(W_{Min})$ , then the wage rate for all qualifying workers will increase, but the number of people employed will fall - from  $Q_2$  to  $Q_3$ . (Ap, An)

The overall impact of the increase in minimum wage is to increase the incomes of  $Q_3$  workers. (Ap, An) This is because, with the addition to their wages (equal to  $W_{Min+} - W_{Min}$ ), they are more likely to approach the average wage of the economy as a whole. (An) For these workers, their experience of income inequality will be reduced. (Ap, An)

The introduction of the increase in minimum wage will also increase the costs of those firms paying less than  $W_{Min+}$ , due to the higher wage payments. (An) With a stable demand for labour and MRP, the firm is likely to reduce their demand for labour, as it is less profitable, or, in some cases, unprofitable to employ those additional workers at the higher MRP. (An) This will create an increase in unemployment of  $Q_2 - Q_3$ , (An) which will, in contrast, increase the likelihood of income inequality, because these workers will lose their jobs and become reliant on lower unemployment benefits rather than their previous wage rate of  $W_{Min}$ . (An)

The extent to which an increase in the National Minimum Wage will impact on income inequality in the UK will depend on a number of factors...

In the UK more than one million workers are employed at the minimum wage rate and the highest proportion is amongst women, ethnic minorities and young people. (Kn) The fear is that a minimum wage encourages firms, keen to protect their profitability, to keep more workers on the lowest band of wages. (Ap) This is because there is a degree of legitimacy in this wage rate with a removal of the expectation that a worker can achieve a higher rate. (An) This situation can lead to inertia in pay increases for low paid workers, as the wage rates (salaries) of higher paid workers continue to increase in a more structured fashion, in part to restore the previous differentials. (An) This makes it more likely that the number of lower paid workers will continue to contribute to established levels of income inequality. (Ev)

The size of the increase in the national minimum wage will determine the extent of the impact on income inequality. (Ev) The greater the increase in the minimum wage the greater the reduction in income inequality. (Ev) However, in a similar fashion, the greater the increase in the minimum wage rate the greater the likelihood that there will be a potential increase in unemployment, as firms reduce the number they employ, and thereby contribute to wider increased income inequality. (Ev)

The wage elasticity of demand for labour is also important in determining the extent to which the increase in the national minimum wage is likely to impact on income inequality. (Ev) The more wage-inelastic the demand for labour, the less will be the increase in unemployment as a result of any given increase in the minimum wage rate. (Ev) This means that the extent of income inequality is likely to be reduced more, as the minimum wage rate increases, than would have been the case with a more wage elastic demand for labour. (Ev) Furthermore, wage-elasticity will vary depending on the work context and, therefore, the overall effect of a particular minimum wage increase, on income inequality, would be very uncertain. (Ev)

The increase in the minimum wage rate will only impact on those who remain in employment, and on wages below the newly established level. (Ev) This means that the increase in minimum wage will impact on income inequality to a greater extent, the greater the number of people there are who remain in employment, who had formally been earning wages below the newly established level. (Ev) If, for reasons of government failure, the increase in the minimum wage only takes the rate to a level that is still below the free market equilibrium level  $W_1$ , then the increase will have no impact on income inequality. (Ev)

Some firms, when confronted by an unavoidable increase in wage rates, not only for the lowest wage employees but also those who demand a restoration of their differentials mentioned earlier, may respond by investing more heavily in training, with a view to increasing their workers' productivity and marginal revenue product and thereby providing the means of increasing wages without a loss of profitability. (An) This approach may, however, result in redundancies - if the firm can, thereafter, produce as much as before with fewer workers. (An) Those who lose their jobs in these circumstances may suffer a fall in income, particularly if they remain unemployed and this, in turn, will contribute to increased income inequality more generally. (An, Ev)

Similarly, other firms confronted by the same prospect of an unavoidable increase in their wage bill and therefore a reduction in their profits, might, where possible, alternatively decide to become more capital intensive. (Ap) This would result in the termination of employment of (many) more of their workers, who might have remained employed had the newly established minimum wage been commercially viable. (An) As a result, the adverse impact of the increase in the national minimum wage on income inequality would be greater. (Ev)

## SECTION C

**4\* In July 2016, in the Republic of Ireland it was reported that an additional 97,000 people joined private medical healthcare schemes, bringing the total insured in the Republic to 2.12 million or 46% of the population.**

**Evaluate the extent to which firms involved in the provision of private medical healthcare are likely to benefit from economies of scale, as a result of the growth in this sector. [25] (AO1 x 6, AO2 x 6, AO3 x 6, AO4 x 7)**

**Level 5 (21-25 marks):**

- **Good** knowledge and understanding / application of the concept of economies of scale in the context of growth in the private medical healthcare sector.
- **Strong** analysis of how firms involved in the provision of private medical healthcare are likely to benefit from economies of scale, as a result of the growth in the sector.
- **Strong** evaluation of the extent to which firms involved in the provision of private medical healthcare are likely to benefit from economies of scale, as a result of the growth in the sector, with a supported judgement being made.
- **QWC:** *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 / application of the concept of economies of scale in the context of growth in the private medical healthcare sector.
- **Strong** analysis of how firms involved in the provision of private medical healthcare are likely to benefit from economies of scale, as a result of the growth in the sector.
- **Good** evaluation of the extent to which firms involved in the provision of private medical healthcare are likely to benefit from economies of scale, as a result of the growth in the sector, but without a judgement being made.
- **QWC:** *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 / application of the concept of economies of scale in the context of growth in the private medical healthcare sector.
- **Good** analysis of how firms involved in the provision of private medical healthcare are likely to benefit from economies of scale, as a result of the growth in the sector.
- **Reasonable** evaluation of the extent to which firms involved in the provision of private medical healthcare are likely to benefit from economies of scale, as a result of the growth in the sector, but without a judgement being made.
- **QWC:** *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 / application of the concept of economies of scale in the context of growth in the private medical healthcare sector.
- **Reasonable** analysis of how firms involved in the provision of private medical healthcare are likely to benefit from economies of scale, as a result of the growth in the sector.
- **Reasonable** evaluation of the extent to which firms involved in the provision of private medical healthcare are likely to benefit from economies of scale, as a result of the growth in the sector, but without a judgement being made.
- **QWC:** *The information has some relevance, but is communicated in an unstructured way. The information is supported by limited evidence and the relationship to the evidence may not be clear.*

**Level 1 (1-5 marks):**

- **Reasonable** knowledge and understanding of the concept of economies of scale and private medical health care.
- **Limited** analysis of how firms involved in the provision of private medical healthcare are likely to benefit from economies of scale, as a result of the growth in the sector.
- **Limited or no** evaluation.
- **QWC:** *Information presented is basic and may be ambiguous or unstructured. The information is supported by limited evidence.*

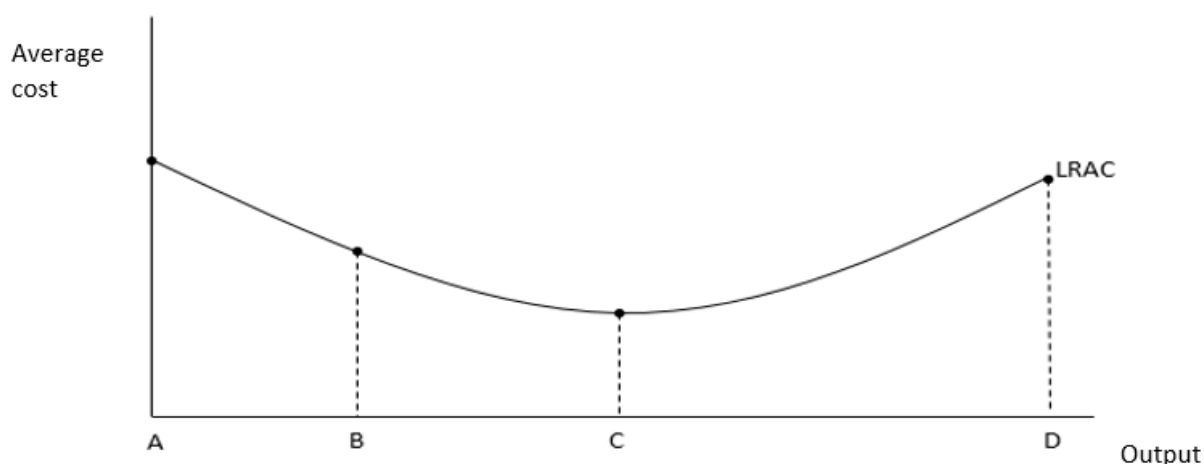
**0 marks:** no response or no response worthy of credit.

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

**Example model answer:**

Private healthcare or private medicine is healthcare and medicine financed by entities other than the government (Kn) and purchased by private individuals or firms on behalf of their employees. (Kn) Economies of scale refer to the notion of a cost advantage that arises with increases in the scale of a firm's operations. (Kn) There are numerous sources of economies of scale that providers of private medical healthcare could exploit, from both within their businesses, and from the sector as a whole. (Kn) Collectively, these cost advantages improve profit levels and, therefore, business sustainability (Kn, Ap). However, as such businesses grow beyond a certain size it is possible that they could suffer from diseconomies of scale. (Kn, Ap)

The growth of incomes and GDP can provide additional demand for firms involved in the provision of private medical healthcare. (Kn, Ap) In response, the increase in the scale of the operations of the service providers is likely to lead to a reduction in their average costs, as they take advantage of the economies of scale. (Ap) On the diagram below, LRAC represents the long-run average cost of production associated with increasing scale of one such provider of private medical healthcare. (Kn/Ap) The long-run average cost of the firm falls from A to B to C as their scale and their output increases. (Kn/Ap)



One reason why the firms involved in the provision of private medical healthcare will achieve economies of scale and falling average costs is because they can take advantage of financial economies of scale. (Kn/Ap) This form of increased efficiency occurs because larger firms have access to cheaper finance, as they may need to borrow much larger sums of money, which, in turn, is likely to be available at lower rates of interest. (An) This will contribute to falling average costs of their operation because the repayments they have to make are lower per unit of their production. (An)



Also, large-scale providers of private medical healthcare can afford to invest in specialist capital machinery, such as MRI scanners or integrated computer systems to coordinate large-scale multi-site operations efficiently. (Ap) This provision is appropriate because of the size of their operations and it is the sort of capital that smaller operations cannot make efficient use of, because of its indivisible nature. (An) However, as the private medical healthcare grows in size, it is more likely that such equipment will be fully employed and cost effective and, therefore, assist the firm in achieving economies of scale and lower per unit costs of their operation. (An)

A further reason that the growing providers of private medical healthcare will achieve economies of scale and falling average costs is through being able to purchase their inputs in greater quantities and thereby negotiate larger discounts from suppliers. (Kn/Ap, An) This will result in the healthcare provider paying lower prices and, therefore, they will enjoy lower per unit costs of their operation. (An)

Organisations that operate on a larger scale can afford to employ expert managers across a range of departments - from clinical care to logistics, and throughout their wider supply chain. (Kn/Ap) This is a form of division of labour and helps to increase the efficiency of the firm; (Ap) the specialists' expertise employed will result in the firms exploiting this type of economy of scale and, therefore, operating at lower unit costs of production. (An)

A private medical healthcare provider can also benefit from **external** economies of scale as a result of growth and developments in the industry as a whole. (Kn/Ap) For example, individual providers of private medical healthcare may benefit from lower research and development costs. (Ap) This is because the bigger the industry, the greater the opportunity for firms to combine resources to fund research and development, reducing the costs of individual private medical healthcare providers who might otherwise rely on doing this on their own. (An)

The extent to which the growth of the private medical healthcare sector in the UK will allow the organisations involved to benefit from economies of scale will depend on a number of factors...

The extent to which the growth of the sector will allow the individual organisations involved to benefit will depend on the original scale of the service providers involved. (Ev) If the providers are already significantly large, they may already have the economies of scale in place and be operating at their minimum efficient scale (MES) of production. (Ev) This corresponds to an output level of C in the diagram above (Ap) and would mean that the firm could not gain any additional economies of scale without there being an improvement in technology, which may, in due course, reduce costs and shift the LRAC downwards, benefitting all businesses in the sector. (An)

It is possible that if one provider of private medical healthcare did expand its existing operations beyond its own MES then, by definition, it would incur diseconomies of scale. (Ev) This occurs when an organisation grows so large that the costs per unit increase as the scale of its operation gets larger. (Kn) This situation usually occurs when an organisation, such as a private hospital, gets too big to be managed efficiently, as communication, motivation and quality can all begin to suffer in such circumstances, (Ap) and thereby undermine efficiencies which have already been secured. (Ev) This can lead overall to an increase in average costs that would correspond to an output level, such as D, in the diagram above. (Ap, An)

The benefit derived by providers of private medical healthcare from any of the sources of the economy of scale identified here will depend upon the ability of a firm to effectively take advantage of them. (Ev) For instance, a firm might not be successful in accessing the lowest interest rates available and, therefore, not secure the benefit of this potential economy of scale. (Ev) Similarly, the expert managers employed, perhaps poorly motivated or poorly incentivised, may underperform and not deliver the cost savings that were anticipated of them, again reducing or effectively eliminating this source of economy of scale. (Ev)

Finally, the extent to which providers of private medical healthcare are able to benefit from economies of scale as a result of the growth in the sector depends on new entrants to the market. (Ev) It is possible that new healthcare providers will enter the market, attracted by the growth and profit potential and if significant numbers of new entrants accommodate the growth, incumbents might experience no growth and, therefore, no further economies of scale as a result of the expansion of the sector. (An, Ev) They may, in fact, suffer from more intense competition, imposing further cost and price pressures. (Ev)

**5\* Barriers to entry in the market for large commercial jet aircraft are extremely high and will prove a challenge to China's state-run aircraft manufacturer, Comac, which is attempting to break into this market.**

**Evaluate the extent to which barriers to entry might determine the degree to which the market for large commercial jet aircraft is contestable. [25] (AO1 x 6, AO2 x 6, AO3 x 6, AO4 x 7)**

**Level 5 (21-25 marks):**

- **Good** knowledge and understanding / application of barriers to entry in the context of contestability in the market for large commercial jet aircraft.
- **Strong** analysis of ways in which barriers to entry might influence contestability in the market for large commercial jet aircraft.
- **Strong** evaluation, with a supported judgement, of the extent to which barriers to entry determine the degree to which the market for large commercial jet aircraft is contestable.
- **QWC:** *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 / application of barriers to entry in the context of contestability in the market for large commercial jet aircraft.
- **Strong** analysis of ways in which barriers to entry might influence contestability in the market for large commercial jet aircraft.
- **Good** evaluation of ways in which barriers to entry might influence the contestability of the market for large commercial jet aircraft, without a judgement being made.
- **QWC:** *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 / application of barriers to entry in the context of contestability in the market for large commercial jet aircraft.
- **Good** analysis of ways in which barriers to entry might influence contestability in the market for large commercial jet aircraft.
- **Reasonable** evaluation of ways in which barriers to entry might influence the contestability of the market for large commercial jet aircraft, without a judgement being made.
- **QWC:** *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 / application of barriers to entry in the context of contestability in the market for large commercial jet aircraft.
- **Reasonable** analysis of ways in which barriers to entry might influence contestability in the market for large commercial jet aircraft.

- **Reasonable** evaluation of ways in which barriers to entry might influence the contestability of the market for large commercial jet aircraft, without a judgement being made.
- **QWC:** *The information has some relevance, but is communicated in an unstructured way. The information is supported by limited evidence and the relationship to the evidence may not be clear.*

**Level 1 (1-5 marks):**

- **Reasonable** knowledge and understanding of barriers to entry and contestable markets.
- **Limited** analysis of ways in which barriers to entry might influence contestability in the market for large commercial jet aircraft.
- **Limited or no** evaluation.
- **QWC:** *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.

**Example Model Answer:**

A contestable market is one where new entrants can come into a market, operate sustainably, and provide fresh competition to established firms, which, through lower prices, will thereby enhance consumer welfare. (Kn) A barrier to entry is an obstacle that can discourage or prevent new competitors from easily entering and contesting a market. (Kn) The barriers can range from natural or structural barriers (Kn) to those that are deliberately constructed by incumbent firms. (Kn) The lower the barriers to entry in an industry the more contestable the market will be and the greater the degree of competition, (which will, in turn, lower the prices, better the products, lower the abnormal profits, and thereby enhance consumer welfare). (Ap) Hence, for a contestable market to exist there must be low barriers to entry (and exit).

The most common barriers to entry include high sunk costs that are irretrievable, and those costs are determined by the specific nature of the business itself. (Kn) Both of these exist in the large commercial jet aircraft industry and both types of barrier are classed as structural. (Kn/Ap)

Legally imposed barriers that allow a firm to operate with limited competition, or even the use of illegal anti-competitive practices, are examples of deliberate barriers to entry. (Kn) All of these barriers will similarly reduce the degree of competition in the market. (Ap)

Sunk costs include those associated with a firm's research and development, marketing and workforce recruitment and training. (Kn) These sunk costs, once incurred, cannot be recovered. (Kn) These costs are particularly high in established and specialised markets, such as jet aircraft manufacturing. (Ap) They can, therefore, act as a significant deterrent to prospective new entrants carefully considering the risks associated with entering and competing in the market. (Ap) In this way, the contestability of the market is reduced. (Ap, An)

The nature of the business itself can cause barriers to entry to exist. (Kn) For example, if there is the potential for significant economies of scale, which incumbents are already exploiting, then new, typically smaller entrants will be deterred from entering and contesting the market. (Ap, An) This is the case with jet aircraft manufacturing because, with initially low production volumes, new entrants, such as Comac, will not be able to compete with the lower cost structures and therefore potentially lower prices that established firms in the industry benefit from. (Ap, An)

These economies of scale can also be the result of the firm's ability, for example, to bulk buy raw materials and components - an important factor in maintaining low average costs in the context of jet aircraft manufacturing. (Ap)

Economies of scale can also arise from the managerial expertise and the cost efficiency that can be delivered with experienced business leaders in well-established manufacturing firms. (Ap) Experienced managers are more likely to make better decisions, which will, in turn, enable the business to survive, retain market share, sustain profits, and render the market less contestable. (An)

Legally imposed barriers to entry include patents or legislation. (Kn) For example, legislation may specify that a licence is required to operate, thereby allowing only those firms which are able to obtain a licence to operate in specific sectors, such as jet aircraft manufacture. (Kn, Ap) These barriers make it virtually impossible for new entrants that are unable to obtain a licence to compete in the market because it would be illegal for them to do so. (Ap) In this sense, they are extremely effective in restricting the contestability in a market. (Ap, An)

Incumbents may also practice illegal anti-competitive activities that create barriers designed to deter potential market entrants. These can include predatory and limit pricing. (Kn, Ap) Predatory pricing involves an incumbent firm deliberately setting a temporary low price in order to deter potential competitors, or force incumbent rivals out of the market, (Kn) thereby limiting the contestability of the market. (An)

Limit pricing is strategy that can be employed by an incumbent firm which sets price just below the likely average total costs of potential entrants, (Kn) thereby significantly restricting the ability of any entrant to make a profit on a sustainable basis, which, in turn, will limit competitive pressure. (An)

Consistent with a strategy of limit pricing, in September 2017, a rival US jet aircraft manufacturer Boeing complained that the UK manufacturer Bombardier had received unfair state subsidies from the UK and Canada. Boeing claimed these subsidies helped Bombardier win a major aircraft order through effectively reducing the contestability in the market. (Ap, An) As described above, the subsidy enabled Bombardier to reduce its price below its average costs, thereby limiting Boeing's competitiveness and its ability to make a profit. (An)

Finally, incumbents may have negotiated exclusive supply arrangements with a certain critical supplier (eg of engines). This would effectively deter or prevent potential competitors from securing a foothold in the market. (An) Even where alternative suppliers exist, poorer quality, a more limited range, or a higher price may undermine the new entrant brand and the level of service a new aircraft manufacturer is willing or able to provide. Either way, the degree of contestability in the market is reduced. (An)

The extent to which these barriers to entry are effective in restricting the competition within a market will depend on a number of factors...

The extent to which sunk costs are a significant deterrent to competition will depend on the resources of the potential market entrants. (Ev) If their financial resources are substantial, then they may be able to risk the large sunk costs involved in the industry without this acting as an effective deterrent to contestability. (Ev) This is more likely to be the case where the incumbents are complacent and have failed to invest effectively in research and development themselves. As a result, contesting the market will be considered less risky by an innovative potential entrant. (An, Ev)

A patent is a significant deterrent to market entrants where one is granted to an incumbent. However, most patents have a maximum life of 20 years and so there may be an opportunity for new firms to contest the market, once the patent has reached its full maturity. (Kn, Ap) This means the degree of competition will increase and the market will thereby become more contestable in the longer term. (Ev)

The extent to which predatory or limit pricing will be effective in deterring new market entrants will depend on an entrant's ability to withstand the short-term losses that they potentially face. (Ev) This will be the case if firms, such as Comac, have significant backing, perhaps from the Chinese government, or they have the financial capacity to compete with incumbent manufacturers at below average costs, without the need to shut down. (Ev) In other words, if the low market price covers Comac's average variable costs of production and makes at least some contribution to fixed costs, then the barrier to entry will not necessarily reduce the degree of contestability in the jet aircraft market, at least not in the short term. (Ev)

Where exclusive contracts exist between suppliers and manufacturers, it is possible that new entrants can still access the market. (Ev) This is because the new entrant may still be able to seek and find an acceptable alternative supplier, or may offer more favourable terms to the incumbent's supplier in order to undermine an incumbent, and thereby successfully contest the market. (Ev)

Finally, if incumbents have negotiated exclusive supply arrangements with certain critical suppliers (eg of engines), the potential entrant could make recourse to a national market regulator, such as the Competition and Markets Authority. (Ap) In the event of the contractual practices being deemed illegal, this could grant access to the supplier for the new entrant. (Ap) In this case, the barrier to entry would be less effective in restricting the degree of contestability. (Ev)

**Assessment Objective Grid**

**PRACTICE PAPER 1**

<b>Question</b>	<b>AO1</b>	<b>AO2</b>	<b>AO3</b>	<b>AO4</b>	<b>Total</b>	<b>(Quantitative Skills)</b>
<b>1 (a)</b>		2			2	
<b>1 (b)</b>	2 (2)	2 (2)			4	(4)
<b>1 (c)</b>	2 (2)	2 (2)			4	(4)
<b>1 (d)</b>	1	1	3	3	8	
<b>1 (e)</b>	1	1	5	5	12	
<b>2/3</b>	6 (2)	6 (2)	6 (2)	7 (2)	25	(8)
<b>4/5</b>	6	6	6	7	25	
<b>Total</b>	<b>18 (6)</b>	<b>20 (6)</b>	<b>20 (2)</b>	<b>22 (2)</b>	<b>80</b>	<b>(16)</b>