# **APT Initiatives Ltd**

www.apt-initiatives.com

Specialists in Business & Economics Education since Sept 1999



1<sup>st</sup> Paper of 4 Full set of 4 can be purchased from <u>www.apt-initiatives.com</u> or individually from <u>www.tes.com/teaching-resources</u>

# Practice (Mock) Exam Paper (1)

for

**Edexcel A Level Economics A** 

## Paper 1

## Markets and Business Behaviour (Themes 1 and 3)

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

Minimising Workloads, Maximising Performance

© APT Initiatives Ltd, 2017. Registered Office: Millstone Lodge, Eaton Upon Tern, Market Drayton, Shropshire, TF9 2BX. Registered in England no. 5211217. Vat registration no. 815 7506 26.

i

## FOREWORD: Important - Read First

This resource contains 1 of 4 Practice (Mock) Examination Papers for Edexcel's A Level Economics Specification A **Paper 1** examination, entitled '**Markets and Business Behaviour**', which concerns **Themes 1 and Theme 3** of the Edexcel A Level Economics A Specification. The full set of 4 papers can be purchased from APT's website: <u>www.apt-initiatives.com</u>, or individually from the TES website: <u>www.tes.com/teaching-resources</u>.

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 at the time of writing this resource) - **relating to Theme 1 and Theme 3 - as possible.** An overview of Economics topics / concepts tested 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 Edexcel for the launch of **the new A level Economics A specification (from 2015)**. The structure, style and format of APT's question papers and mark schemes are in line with this SAM, with a few minor differences / additions considered beneficial for both teachers and their students. These are highlighted in the text that follows. Differences between the SAM for AS Paper 1 and Paper 2 and **the first set of AS examination papers** sat in June 2016, have also been taken into account, as these differences may very well be evident in the first set of A Level examination papers (in June 2017).

In line with Edexcel's SAM for A level Paper 1 (published at the time of writing), each question paper contains **three** sections, with students being required to **answer all questions** from **Section A and Section B**, and **one** from **Section C**.

Section A comprises a range of **multiple-choice** and **short-answer** questions. Section B comprises **one data response** question broken down into a number of parts. Section C comprises 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 100 marks available. The questions included in each paper ensure students gain appropriate exam practice across Edexcel's four A Level assessment objectives.

The question papers provide **space for students to write down their answers in line with the SAM for A Level Paper 1** (published at the time of writing). The space allocated may change based on the experience of actual examinations.

**Marks** have been **weighted** according to **Edexcel's assessment objective requirements at A Level** - as detailed in the A Level Specification (p.42-43) and the Edexcel AS and A Level Economics 'Getting Started Guide' (p.6) (published at the time of writing). Hence, between 20-30% of the marks have been allocated to each assessment objective within each paper ie knowledge / understanding (A01), application (A02), analysis (A03), and evaluation (A04). An assessment objective grid is provided after each mark scheme / set of answers which shows the total marks allocated for each assessment objective for each paper.

**Multiple choice** questions each carry a mark for knowledge / understanding or application. For each multiple choice question included in this resource, the skill being tested is identified in the mark scheme as well as in the assessment objective grid provided at the end of each paper's mark schemes / answers. In contrast to the SAM for A Level Paper 1 (published at the time of writing), multiple choice questions require students to **mark a cross next to their chosen response**, as opposed to writing down the letter representing their chosen response in a box. This is in line with the first set of AS examination papers sat in June 2016.

For questions requiring a calculation, marks are generally awarded for applying the source figures to arrive at the correct result. Knowledge marks may, however, be awarded for subject specific knowledge is knowledge of how to calculate economic formulae, such as calculation of marginal cost, or the five firm concentration ratio.

РТО...

In line with Edexcel's SAM for A Level Paper 1, the mark schemes to some of the questions posed award **knowledge** marks for **definitions** of **key economic terms** / **concepts relevant to the question, even if a question does not explicitly ask them to do this** (eg Q5a, 6c, 6d, 7 and 8 of Edexcel's original SAM for A Level Paper 1). Thus, students should be encouraged to **define economic terms** / **concepts relevant to the question**, prior to answering a question directly.

For the Section B and Section C questions worth 10 or more marks (where 'level descriptors' are used to mark students' answers), in order to make it easy to follow answers through to their completion and to mark students work, the mark schemes and answers provided in this resource cite all 4 assessment objectives one after the other, ie evaluation is cited immediately after knowledge, application and analysis, rather than being cited separately. Detailed example model answers are also 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 are demonstrated** - with 'Kn' for knowledge, 'Ap' for application, '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**. 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 10 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 beyond the maximum mark available** for that particular question. Hence, there is scope to cut such answers down 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-todate 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.

These Practice (Mock) Exam Papers for Paper 1 (on Themes 1 & 3) are one of several resources produced by **APT Initiatives Ltd** to support teachers and students taking Edexcel **AS & A Level** Economics A examinations. Interim and End of Theme Papers have been produced for Theme 1, Theme 2, Theme 3 and Theme 4, and Practice (Mock) Exam Papers have been produced for the other two **A Level** examinations ie Paper 2 (on Themes 2 & 4) and Paper 3 (on all 4 Themes). Further information on each of these resources, as well as other resources for Business and Economics qualifications, is available on APT's website: <u>www.apt-initiatives.com</u>.

**APT Initiatives Ltd** can be contacted directly with any orders, queries or feedback via the website: <u>www.apt-initiatives.com</u>, via email: <u>support@apt-initiatives.com</u> or by phone: 01952 540877.

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

The grids below show the Economics topics / concepts tested (relating to Theme 1 and to Theme 3) in the practice paper contained in this resource, by which question / part question in the paper. Note: These grids should not be used as a source of reference of all the subject content that candidates are required to study for Edexcel A-level Economics A - Theme 1 and Theme 3, 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 Edexcel website, where the most current versions of Edexcel specifications are placed.

Subjec	ect Content Q	
1.1	Nature of Economics	
1.1.5	Specialisation and the division of labour	
a)	Specialisation and division of labour: reference to Adam Smith	4a
b)	Advantages / disadvantages of specialisation and division of labour in organising production	4b
c)	Advantages / disadvantages of specialising in the production of goods and services to trade	4a
1.2	How Markets Work	
1.2.2	Demand	
a)	Distinction between movements along a demand curve and shifts of a demand curve	6b
b)	Factors that may cause a shift in the demand curve (conditions of demand)	6a 6b
c)	Diminishing marginal utility and how this influences the shape of the demand curve	
1.2.3	Price, income and cross elasticities of demand	
a)	Understanding of price, income and cross elasticities of demand	1a 1b
b)	Calculate price, income and cross elasticities of demand	1a
e)	Significance of elasticities of demand to firms and government in terms of: imposition of indirect taxes and subsidies; changes in real income; changes in prices of substitute and complementary goods	1c
1.2.4	Supply	
b)	Factors that may cause a shift in the supply curve (the conditions of supply)	6a 7
1.2.6	Price determination	
d)	Use of supply and demand diagrams to show how shifts in demand and supply	6a
	curves cause the equilibrium price and quantity to change in real-world situations	7
1.2.7	Price mechanism	_
b)	Price mechanism in the context of different types of markets, including local, national and global markets	7
1.2.9	Indirect taxes and subsidies	
a)	Supply and demand analysis, elasticities, and: impact of indirect taxes on consumers, producers and government; incidence of indirect taxes on consumers and producers; impact of subsidies on consumers, producers and government; area that represents the producer subsidy and consumer subsidy	3a 3b 3c 7

#### Theme 1

1.3	Market Failure	
1.3.1	Types of market failure	
b)	Types of market failure: externalities, under-provision of public goods, information	7
	gaps	
1.3.2	Externalities	
a)	Distinction between private costs, external costs and social costs	7
b)	Distinction between private benefits, external benefits and social benefits	7
d)	Use of a diagram to illustrate: external benefits of consumption using marginal analysis; distinction between market equilibrium and social optimum position; identification of welfare gain area	7
e)	Impact on economic agents of externalities and government intervention in various markets	7

## Theme 3

Subject	Content	P1
3.1	Business Growth	
3.1.2	Business growth	
a)	How businesses grow: organic growth; forward and backward vertical integration; horizontal integration; conglomerate integration	6c
b)	Advantages and disadvantages of: organic growth; vertical integration; horizontal integration; conglomerate integration	6c
3.2	Business Objectives	
3.3	Revenues, Costs and Profits	
3.3.2	Costs	
a)	Formulae to calculate and understand the relationship between: total cost; total fixed cost; total variable cost; average (total) cost; average fixed cost; average variable cost; marginal cost	2a 4c
3.3.3	Economies and diseconomies of scale	
b)	Minimum efficient scale	2a
3.4	Market Structures	
3.4.1	Efficiency	
a)	Allocative efficiency	6d 6e
b)	Productive efficiency	2b
		6d 6e
<u>c)</u>	Dynamic efficiency	6d 6e
d)	X-inefficiency	6d 6e
e)	Efficiency/inefficiency in different market structures	6d 6e
3.4.2	Perfect competition	
a)	Characteristics of perfect competition	6d
b)	Profit maximising equilibrium in the short run and long run	6d
c) <b>3.4.5</b>	Diagrammatic analysis	6d
	Monopoly Characteristics of monopoly	60
a) b)	Profit maximising equilibrium	6e 6e
(U) C)	Diagrammatic analysis	6e
e)	Costs and benefits of monopoly to firms, consumers,	6e
e)	employees and suppliers	0e
3.4.7	Contestability	
a)	Characteristics of contestable markets	8
b)	Implications of contestable markets for behaviour of firms	8
c)	Types of barrier to entry and exit	8
d)	Sunk costs and the degree of contestability	5a 5b 8

Write your name here

Surname

Other names

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

## **Pearson Edexcel**

Level 3 GCE

# **Economics A**

## Advanced

## Paper 1: Markets and Business Behaviour

#### Time: 2 hours

You do not need any other materials.

Total Marks

#### Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name. (*Note: Your centre number and candidate number will also be required in the actual exam*).
- There are three sections in this question paper.
- Answer all questions in Section A and Section B.
- Answer **one** question from Section C.
- Answer the questions in the spaces provided there may be more space than you need.

#### Information

- The total mark for this paper is 100.
- 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 each question, the extracts in Section B, and your answers).
- Calculators may be used.

#### Advice

- Read each question carefully before you start to answer it.
- Check your answers if you have time at the end.

#### SECTION A

#### Answer ALL questions. Write your answers in the spaces provided.

Some questions must be answered with a cross in the box  $\boxtimes$ . If you change your mind about an answer, put a line through the box  $\boxtimes$  and then mark your new question with a cross  $\boxtimes$ .

Use the data to support your answers where relevant. You may annotate and include diagrams in your answers.

1 A report from Public Health England, based on evidence from research in countries where a sugar tax has been imposed, suggests a price increase of 10% in sugary drinks in the UK, would reduce demand for the drinks by 7%. The Office for Budgetary Responsibility expects that any increase in a 'sugar tax', which is thought will equate to between 18p - 24p per litre in the UK, would be mainly passed on to consumers.

Adapted from: 'Will a sugar tax actually work?' The Guardian, March 16, <u>https://www.theguardian.com/news/datablog/2016/mar/16/will-a-sugar-tax-actually-work-budget</u>, (accessed November 2016)

(a) With reference to the data provided, calculate the price elasticity of demand for sugary drinks in the UK. You are advised to show your working.

(b) 'The Office for Budgetary Responsibility expects that any increase in a 'sugar tax', would be mainly passed entirely on to consumers' (lines 3-5).

This outcome is more likely when the price elasticity of demand is:

(1)

(2)

- **A** relatively elastic
- **B** relatively inelastic
- C perfectly elastic
- **D** unit elastic

(c) If the demand for fruit juices increases after the increase in tax on sugary drinks, explain what can be inferred about the relationship between the products from their cross price elasticity of demand.

	(Total for Question 1 = 5 ma	rks)
		(∠)
		(2)

2 The table below shows how the total costs of a firm, making storage boxes, changes as the scale of their output increases. The firm is currently operating at its minimum efficient scale (MES).

Output	Total cost of production	Average cost of production before the increase in cost
200	£400	
300	£450	
400	£500	
500	£525	
600	£660	

As a result of an increase in the cost of raw materials, the total cost of production increases by 15% at all levels of output.

(a) Calculate the increase in total costs if the firm continues to operate at its MES after the increase in the cost of raw materials. Use the last column for your workings.

(b) It can be deduced from the data that:
 A the firm is not capable of achieving productive efficiency

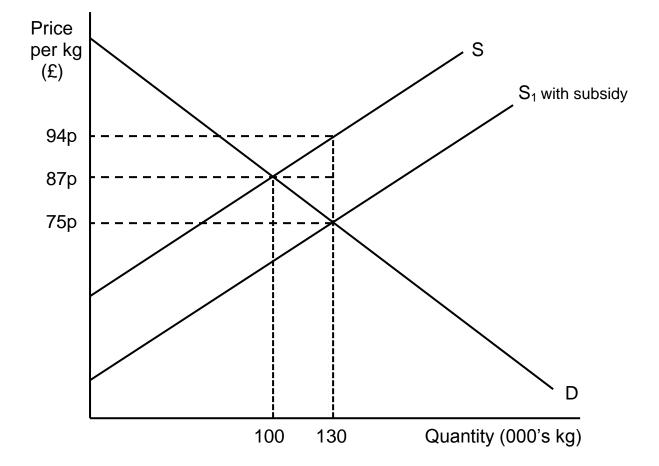
- **B** the firm achieves productive efficiency at all levels of output
- **C** the firm achieves productive efficiency at 500 units of output
- **D** the firm achieves productive efficiency at 600 units of output

(Total for Question 2 = 5 marks)

(4)

3 In August 2016, Phillip Hammond, the UK Chancellor announced that the UK Government will continue paying subsidies currently received by UK farmers from Brussels after Britain leaves the European Union. The diagram below shows the effect of such a subsidy on poultry prices and sales.

Adapted from: 'Farmers, universities and scientists silenced as UK Gov promises to match EU funds', August 2016, Little, A., Express, http://www.express.co.uk/news/politics/699534/uk-continue-paying-farm-subsidies-2020-philip-hammond-announces-brexit (accessed June 2017)



(a) In the diagram above, the subsidy on a kilogram of poultry is an example of:

(1)

- A an ad valorem subsidy
- B a per unit subsidy
- C a negative tax
- **D** a revenue subsidy

(Total for Question 3 = 5 m	arks)
(c) With reference to the diagram, calculate the total cost of the subsidy to the government. You are advised to show your working.	(2)
gain as a result of the subsidy. You are advised to show your working.	(2)
(b) With reference to the diagram, calculate the total value of the benefit that consu	

4 The following table shows the output of tea produced by hill farmers in the Nuwara Eliya region of Sri Lanka. The table contains information on the output levels before and after division or labour and specialisation in the production processes, with different numbers of workers employed.

Number of workers	Output per day in kg before specialisation and the division of labour	Output per day in kg after specialisation and the division of labour
1	50	200
2	100	450
3	150	780
4	200	1000
5	250	1200

(a) It can be deduced from the data that, as a result of specialisation and the division of labour, the greatest increase in productivity occurs when there are:

(1)

(2)

- **A** 2 workers
- **B** 3 workers
- C 4 workers
- **D** 5 workers
- (b) Explain **one** disadvantage of specialisation and the division of labour when organising production.

(c) The costs of producing tea are made up of a fixed cost of \$US 50 per day and a variable labour cost, where each additional worker is paid the equivalent of \$US 20 per day.

Calculate the average cost per Kg of tea output, when 5 workers are employed. You are advised to show your working. (2)

 (Total for Question 4 = 5 marks)

- 5 Information from the Chinese economy points to a slowdown in economic growth. One response from the Chinese authorities has been the unveiling of details regarding how the economy will embrace privatisation and, therefore, the increased emergence of markets and contestability.
  - (a) Explain how sunk costs can impact on the contestability of a market in the context of the Chinese economy.

(b) In which one of the following industries are sunk costs likely to be low?

(1)

(4)

- A Car manufacturing
- B Fast food outlets
- **C** Electricity generation
- **D** Household water provision

(Total for Question 5 = 5 marks)

#### TOTAL FOR SECTION A = 25 MARKS

\_\_\_\_ 10

## **BLANK PAGE**

## **QUESTION 6 BEGINS ON THE NEXT PAGE**

### Read Figure 1 and the following extracts (A to C) before answering Question 6. Write your answers in the spaces provided.

#### Retail in the UK

Extract A

#### Sainsbury's and Home Retail Group merge

Sainsbury's has warned that up to 600 head office jobs are at risk in its £1.4bn takeover of Argos owner, Home Retail Group. However, through the merger, Sainsbury's bosses want to create one of the largest retailers in the UK and the capacity to offer fast home delivery on 90 000 products, and through over 2000 stores.

Sainsbury's expects the overall effect of the acquisition on the combined workforce of the group to be positive over the long term. It is expected that the net increase of around 1,000 or more retail operations roles will more than counterbalance the 400 to 600 reduction in corporate and support function roles.

Adapted from: 'Sainsbury's says 600 jobs could go in Home Retail Group takeover' July 5 2016, Wood, Z., the Guardian, https://www.theguardian.com/business/2016/jul/05/sainsburys-says-600-jobs-could-go-in-home-retail-group-merger (accessed November 2016) and 'J Sainsbury plc completes acquisition of Home Retail Group plc, J Sainsbury PLC, September 2016, http://www.j-sainsbury.co.uk/media/latest-stories/2016/0902-j-sainsbury-plc-completes-acquisition-ofhome-retail-group-plc/ (accessed November 2016)

#### Extract B

#### Amazon enters the grocery home delivery market

In June 2016, Amazon Prime customers in London were, for the first time, able to order a full weekly shop and get it delivered the same day. Amazon's plans to extend this grocery delivery service, 'Amazon Fresh', across other areas of the UK in the future.

This signalled a new phase in the competition faced by the big four grocers - and the delivery firm Ocado. Amazon Fresh means that customers will be able to shop from 130,000 food products, including fruit and vegetables. The convenience and ultra-competitive pricing offered by Amazon will increase the demand with urban shoppers. This will create the need for greater efficiency amongst Amazon's online grocery based competitors.

Adapted from: 'Amazon launches full online supermarket service in UK' June 9 2016, Simpson, E., BBC Business, http://www.bbc.co.uk/news/business-36485318, (accessed November 2016) 5

5

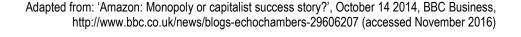
#### Extract C

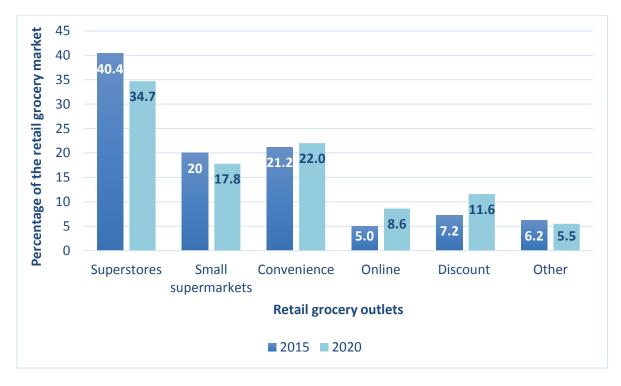
#### Calls for regulation as Amazon reinvests profits

Traditional economic theory predicts that a monopoly will charge a higher price whilst restricting output and quality to below the level of a competitive market. There are economists who regard Amazon as a monopolist in the e-book 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 innovation rather than putting them in the hands of its investors. This results in benefits for millions of 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 is has found a way to give consumers what they want is to misunderstand the nature of capitalism.





#### Figure 1 Growth of retail grocery outlets estimated 2015 to 2020

Adapted from: 'The growth potential of online grocery' Henry, V., IGD, July 14 2015, http://www.igd.com/Research/Shopper-Insight/Thegrowth-potential-of-online-grocery/ (accessed November 2016)

5

10

6 (a) Use a demand and supply diagram to explain the impact on price and quantity, of the changes in demand and supply of online sales in the retail grocery market. (Figure 1, and Extract B).

(b) With reference to Extract B, examine **two** factors that are likely to cause an increase in demand for the 'Amazon Fresh' service.


(8)

(c)	With reference to Extract A, assess the likely advantages to Sainsbury's of its
	merger with Home Retail Group.

(10)

(d) With reference to Fig 1 and Extract B, discuss the extent to which competition is likely to create efficiency.

(12)

(e) With reference to Extract C, discuss the economic costs and benefits of monopoly as a market structure.

(15)

(Total for Question 6 = 50 marks)

TOTAL FOR SECTION B = 50 MARKS

#### SECTION C

#### Answer ONE question from this section.

#### Write your answers in the space provided.

#### EITHER

7 Evaluate the extent to which a case can be made for subsidies to be provided to producers of goods that generate positive externalities in consumption.

#### (Total for Question 7 = 25 marks)

#### OR

8 Barriers to entry in the aircraft manufacturing market are extremely high and will prove a challenge, for example, to Chinese firms hoping to break into commercial aircraft manufacturing.

Evaluate the extent to which barriers to entry can determine the degree of competition in a market.

(Total for Question 8 = 25 marks)

Indicate which question you are answering by marking a cross in the box  $\boxtimes$ . If you change your mind, put a line through the box  $\boxtimes$  and then indicate your new question with a cross  $\boxtimes$ .  $\mathbf{X}$ Chosen question number: **Question 7** Question 8 Write your answer here: ..... ..... ..... .....

## TOTAL FOR SECTION C = 25 MARKS TOTAL FOR PAPER = 100 MARKS

## Mark Schemes & Example Model Answers

#### PRACTICE PAPER 1

#### SECTION A

1 A report from Public Health England, based on evidence from research in countries where a sugar tax has been imposed, suggests a price increase of 10% in sugary drinks in the UK, would reduce demand for the drinks by 7%. The Office for Budgetary Responsibility expects that any increase in a 'sugar tax', which is thought will equate to between 18p – 24p per litre in the UK, would be mainly passed on to consumers.

Adapted from: 'Will a sugar tax actually work?' The Guardian, March 16, <u>https://www.theguardian.com/news/datablog/2016/mar/16/will-a-sugar-tax-actually-work-budget</u>, (accessed November 2016)

(a) With reference to the data provided, calculate the price elasticity of demand for sugary drinks in the UK. You are advised to show your working.

Question Number	Answer	Mark
1(a)	Knowledge 1, Application 1	
	Knowledge / Understanding : 1 mark for knowledge of the correct formula:	
	• % change in quantity demanded / % change in price.	
	<b>Application:</b> 1 mark for applying the formula correctly to obtain the correct answer:	
	• 7 / 10 (1) = 0.7. (1)	
	NB If just the answer 0.7 is given award 2 marks.	(2)

(b) 'The Office for Budgetary Responsibility expects that any increase in a 'sugar tax', would be mainly passed on to consumers' (3-5).

This outcome is more likely when the price elasticity of demand is:

- A relatively elastic
- **B** relatively inelastic
- **C** perfectly elastic
- **D** unit elastic

Question Number	Answer	Mark
1(b)	Application 1 B	(1)

(c) If the demand for fruit juices increases after the increase in tax on sugary drinks, explain what can be inferred about the relationship between the products from their cross price elasticity of demand.

Question Number	Answer	Mark
1(c)	Knowledge 1, Analysis 1	
	<b>Knowledge / Understanding:</b> 1 mark for knowledge of cross price elasticity of demand, e.g.	
	• Cross price elasticity of demand relates the change in the price of one good to a change in demand for another good. (1)	
	Analysis: 1 mark for linking this to the products, e.g.	
	A positive cross price elasticity of demand means that the goods are substitutes because, in this case, an increase in the price of sugary drinks has led to an increase in the demand for fruit juices. (1)	(2)

2 The table below shows how the total costs of a firm, making storage boxes, changes as the scale of their output increases. The firm is currently operating at its minimum efficient scale (MES).

Output	Total cost of production	Average cost of production before the increase in cost
200	£400	
300	£450	
400	£500	
500	£525	
600	£660	

As a result of an increase in the cost of raw materials, the total cost of production increases by 15% at all levels of output.

(a) Calculate the increase in total costs if the firm continues to operate at its MES after the increase in the cost of raw materials. Use the last column for your workings.

Question Number	Answer	Mark
2(a)	Knowledge 2, Application 2	
	Knowledge / Understanding:	
	1 mark for correctly identifying the MES. 1 mark for knowing how to calculate the increase in total cost (percentage change).	
	Application:	
	1 mark for any correct answer in average cost column. 1 mark for correct calculation of the increase in total cost.	

Output	Total cost of production	Average cost of production before the increase in cost	
200	£400	£2	
300	£450	£1.50	
400	£500	£1.25	
500	£525	£1.05	
600	£660	£1.10	
• £525 x 0.15 =	the increase in cost = 50 = £78.75 increase in tota swer of £78.75 is given a	al cost.	(4)

(b) It can be deduced from the data that:

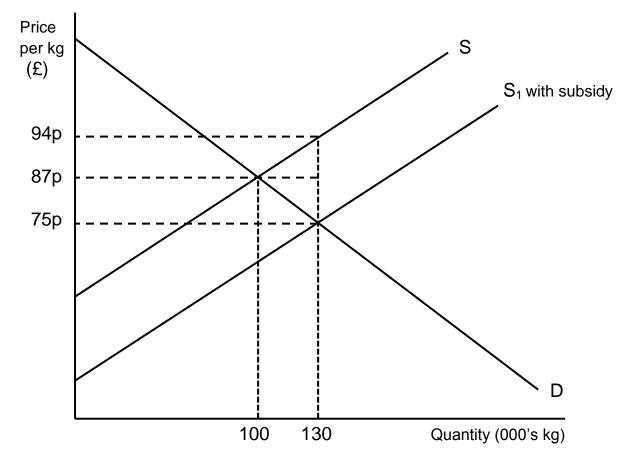
- A the firm is not capable of achieving productive efficiency
- B the firm achieves productive efficiency at all levels of output

#### C the firm achieves productive efficiency at 500 units of output

**D** the firm achieves productive efficiency at 600 units of output

Question Number	Answer	Mark
2(b)	Application 1 C	(1)

3 In August 2016, Phillip Hammond, the UK Chancellor announced that the UK Government will continue paying subsidies currently received by UK farmers from Brussels after Britain leaves the European Union. The diagram below shows the effect of such a subsidy on poultry prices and sales.



(a) In the diagram above, the subsidy on a kilogram of poultry is an example of:

- A an ad valorem subsidy
- B a per unit subsidy
- **C** a negative tax
- **D** a revenue subsidy

Question Number	Answer	Mark
3(a)	Knowledge 1 B	
		(1)

(b) With reference to the diagram, calculate the total value of the benefit that consumers gain as a result of the subsidy. You are advised to show your working.

Question Number	Answer	Mark
3(b)	Knowledge 1, Application 1	
	<ul> <li>Knowledge / Understanding: 1 mark for knowledge of the appropriate formula:</li> <li>Value of the benefit per kg = Original price per kg before subsidy - New price per kg after subsidy.</li> <li>Total value of the benefit = Value of the benefit per kg x New quantity demanded.</li> </ul>	
	<ul> <li>Application: 1 mark for the correct answer:</li> <li>0.87 - 0.75 = 0.12 x 130,000 = £15,600.</li> </ul>	(2)
	NB If just the answer of £15,600 is given, award 2 marks.	

(c) With reference to the diagram, calculate the total cost of the subsidy to the government. You are advised to show your working.

Question	Answer	Mark
Number		
3(c)	Knowledge 1, Application 1	
	<ul> <li>Knowledge / Understanding: 1 mark for knowledge of the appropriate formula:</li> <li>Subsidy per kg = Total price per kg received by the producer - Price per kg received from the consumer.</li> <li>Total cost of this subsidy = Subsidy per kg x New quantity demanded.</li> </ul>	
	<ul> <li>Application: 1 mark for the correct answer:</li> <li>0.94 - 0.75 = 0.19 x 130,000 = £24,700.</li> </ul>	(2)
	NB If just the answer of £24,700 is given, award 2 marks.	

4 The following table shows the output of tea produced by hill farmers in the Nuwara Eliya region of Sri Lanka. The table contains information on the output levels before and after division of labour and specialisation in the production processes, with different numbers of workers employed.

Number of workers	Output per day in kg before specialisation and the division of labour	Output per day in kg after specialisation and the division of labour
1	50	200
2	100	450
3	150	780
4	200	1000
5	250	1200

- (a) It can be deduced from the data that, as a result of specialisation and the division of labour, the greatest increase in productivity occurs when there are:
  - A 2 workers
  - B 3 workers
  - **C** 4 workers
  - **D** 5 workers

Question Number	Answer	Mark
4(a)	Application 1 B	
		(1)

(b) Explain **one** disadvantage of specialisation and the division of labour when organising production.

Question Number	Answer	Mark
4(b)	Knowledge 1, Analysis 1	
	<b>Knowledge / Understanding:</b> 1 mark for identifying a disadvantage, e.g.	
	The limited repetitive task assigned to the worker can become boring.	
	Analysis: 1 mark for development, e.g.	
	<ul> <li>As a result of this, workers could become demotivated and the quality of the output produced could deteriorate. (1) OR</li> <li>This could result in high absenteeism from demotivated workers. (1)</li> </ul>	
		(2)

(c)The costs of producing tea are made up of a fixed cost of \$US 50 per day and a variable labour cost, where each additional worker is paid the equivalent of \$US 20 per day.

Calculate the average cost per Kg of tea output, when 5 workers are employed. You are advised to show your working.

Question Number	Answer	Mark
4(c)	Knowledge 1, Application 1	
	Knowledge / Understanding: 1 mark for knowledge of the appropriate formula:	
	<ul> <li>TC = TFC + TVC</li> <li>ATC = TC / Output. (1)</li> </ul>	
	Application: 1 mark for the correct answer:	
	<ul> <li>TC = \$US50 + \$US100 = \$US150</li> <li>\$US150 / 1200Kg = \$US 0.13 per Kg. (1)</li> </ul>	
	NB If just the answer of \$US 0.13 per Kg is given award 2 marks.	(2)

- **5** Information from the Chinese economy points to a slowdown in economic growth. One response from the Chinese authorities has been the unveiling of details regarding how the economy will embrace privatisation and, therefore, the increased emergence of markets and contestability.
  - (a) Explain how sunk costs can impact on the contestability of a market in the context of the Chinese economy.

Question Number	Answer	Mark
5(a)	Knowledge 2, Application 1, Analysis 1	
	<b>Knowledge / Understanding:</b> 1 mark for knowledge of sunk costs and 1 mark for knowledge of contestability, e.g.	
	• A sunk cost is a cost that a firm incurs that cannot be recovered, even if the firm shuts down. (1)	
	• Contestability refers to the degree of freedom of entry and exit for firms into and from a market. (1)	
	<ul> <li>Application: 1 mark for application of a sunk cost, e.g.</li> <li>In the context of the Chinese economy, a sunk cost might be the additional expenditure on education and training required to equip a workforce to become more productive and, therefore, competitive in the private sector, or in a global market. This expenditure cannot be recovered by the firm. (1)</li> </ul>	
	<ul> <li>Analysis: 1 mark for linked development to contestability, e.g.</li> <li>If the sunk costs are high this may deter firms from entering or exiting a market due to the potential unrecoverable loss, and make it difficult for the Chinese authorities to increase the contestability of their markets. (1)</li> </ul>	(4)

(b) In which one of the following industries are sunk costs likely to be low?

- A Car manufacturing
- B Fast food outlets
- **C** Electricity generation
- D Household water provision

Question Number	Answer	Mark
5(b)	Knowledge 1	
	В	(1)

#### SECTION B

6 (a) Use a demand and supply diagram to explain the impact on price and quantity, of the changes in demand and supply of online sales in the retail grocery market. (Figure 1 and Extract B).

Question Number	Answer	Mark
6(a)	Knowledge 1, Application 1, Analysis 3	
	Knowledge / understanding: 1 mark for:	
	<ul> <li>accurate supply and demand diagram with labels and original equilibrium (E<sub>1</sub>). (1)</li> </ul>	
	<ul> <li>Application: 1 mark for identifying that:</li> <li>demand and supply in the online retail grocery market have both increased. (1)</li> </ul>	
	<ul> <li>Analysis: Up to 3 marks, 1 for each of the following:</li> <li>Supply curve shifts rightwards S<sub>1</sub> to S<sub>2</sub>. (1)</li> <li>Demand curve shifts rightwards D<sub>1</sub> to D<sub>2</sub>. (1)</li> <li>There is a new equilibrium showing lower price and increased quantity E<sub>2</sub>. (1)</li> </ul>	
	Price	
	$P_1 \\ P_2 \\ P_2 \\ P_2 \\ D_1 \\ D_1 \\ D_1 \\ D_1 \\ D_1 \\ D_1 \\ D_2 \\ D_1 $	
	Q <sub>1</sub> Q <sub>2</sub> Quantity	(5)

(b) With reference to Extract B, examine **two** factors that are likely to cause an increase in demand for the 'Amazon Fresh' service.

Question Number	Answer	Mark
6(b)	Knowledge 2, Application 2, Analysis 2, Evaluation 2	
	<b>Knowledge / understanding:</b> up to 2 marks for identification of two factors (1+1), e.g.	
	<ul><li>Convenience</li><li>Ultra-competitive pricing</li></ul>	
	Application: Up to 2 marks for reference to the data (1+1), e.g.	
	<ul> <li>Amazon offers the convenience of online shopping from a very extensive range of 130 000 food (including fresh) products delivered the same day. (1)</li> <li>Amazon has chosen to price their service, including delivery, ultra-competitively, by comparison with established food retailers. (1)</li> </ul>	
	Analysis: Up to 2 marks for linked development (1+1), e.g.	
	<ul> <li>Demand for Amazon Fresh will increase because placing the convenience of 130 000 food (including fresh) products, delivered the same day, at the disposal of consumers, will represent significant value-added, in contrast to the service offered by established food retailers. This will lead to a shift of the demand curve to the right. (1)</li> <li>The ultra-low pricing policy of Amazon Fresh will cause an extension of demand, and a movement down their demand curve. This is because the lower prices will lead to more consumers demanding the Amazon Fresh product. (1)</li> </ul>	
	Evaluation: Up to 2 marks for 2 evaluative comments, e.g.	
	<ul> <li>The extent to which Amazon Fresh will effectively be able to increase demand depends on the firm's ability to actually deliver the fresh produce that they claim. If their logistics cannot manage to make their claims a reality, the expectations of their customers will not be fulfilled and any increase in demand is likely to be temporary. (1)</li> <li>The extent to which Amazon Fresh can benefit from its relatively, ultra-low pricing will depend on the ability and willingness of its competitors to price match the low prices of Amazon Fresh. The</li> </ul>	
	greater this ability, the less significant will be any increase in the expected demand arising from this low price strategy. (1)	(8)

(c) With reference to Extract A, assess the likely advantages to Sainsbury's of its merger with
Home Retail Group.

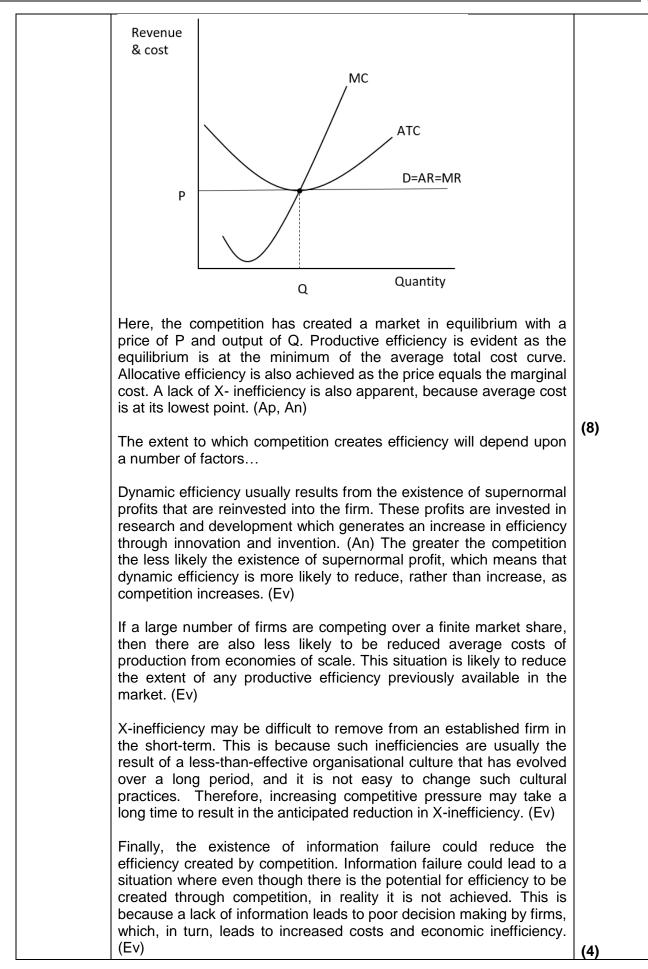
Question	Answer	Mark
Number 6(c)	Knowledge 2, Application 2, Analysis 2, Evaluation 4	
	A merger is a process that unites two existing firms which agree to form a new company, combining the assets of both. (Kn) When the two existing firms are at the same stage of production this integration is said to be horizontal in nature. (Kn)	
	The takeover by Sainsbury's of Home Retail Group is an example of horizontal integration, and has been undertaken in order to secure a market advantage. (Ap) This advantage can be exploited through the considerably increased size of the new business that Sainsbury's now controls. (Ap) Furthermore, Sainsbury's ability to make home deliveries is significantly enhanced through access to the resources of Home Retail Group. (Ap)	
	The advantage for Sainsbury's of the increased size of its operation and at the same stage of production, is the economies of scale that it would now be able to exploit. (Ap) This is an advantage because the economies of scale gained will allow the average cost of production to fall, and profits and productive efficiency to increase. (An)	
	The new, larger firm is also not only able to make efficiency savings by streamlining duplicated tasks between the firms in the short term, but also by expanding operations as the new larger firm continues to grow organically over the longer term. (An)	
	The increased capacity to make home deliveries is a particular advantage to Sainsbury. This is because it allows Sainsbury's to expand its business rapidly into a new, growing, and profitable area. Otherwise it would have found it riskier, costlier and more time- consuming to establish the sustainable market share it was seeking. (An)	
	The extent to which the merger will be an advantage to Sainsbury's will depend upon a number of factors	(6)
	The streamlining of the duplicated tasks must be quick and effective. If the duplicated tasks are allowed to continue for too long this will lead to X-inefficiency and a loss of profit. (Ev)	
	Moreover, the merger will involve the integration of the two firms' cultures, which, unless addressed quickly, can cause difficulties. This is particularly the case when the expanding division, which is being incorporated, has an operational scope that is essentially new to the firm making the takeover. (Ev) This is the case with the home delivery aspect of Home Retail Group (HRG) where the capability, experience and, therefore, efficient operation are primarily being delivered by the firm being taken over. This could be a disadvantage if HRG management does not deliver the expected levels of profit. (Ev)	
		(4)

1	N/	Descriptors for Knowledge, Application and Applysic
Level	Mark	Descriptors for Knowledge, Application and Analysis
	0	Gives a completely inaccurate response.
Level 1	1-2	<ul> <li>Shows discrete or imprecise knowledge and understanding of economic terms, concepts, theories or models, ie knowledge and understanding is considered in isolation and lacks exactness and accuracy of expression or detail.</li> </ul>
		<ul> <li>Uses generic or irrelevant information or examples, ie information and examples that could apply to any context or that are not relevant to the context / question.</li> </ul>
		Gives a descriptive response - there are no chains of reasoning evident / links made between causes and effects.
Level 2	3-4	• Shows elements of knowledge and understanding of economic principles, concepts, theories or models.
		<ul> <li>Applies economic knowledge and understanding to economic problems in context, but does not focus on the broad elements of the question ie the answer may stray from the question set.</li> </ul>
		• Gives a narrow or unbalanced response - chains of reasoning are evident but are not fully developed, or only one point of view is considered.
Level 3	5-6	Demonstrates accurate knowledge and understanding of economic principles, concepts, theories or models.
		<ul> <li>Applies appropriate economic knowledge and understanding to the context / precise question set, using relevant examples, which are fully integrated.</li> </ul>
		<ul> <li>Provides a wide and balanced response - chains of reasoning are developed and more than one point of view is considered.</li> </ul>

Level	Mark	Descriptors for Evaluation
	0	Makes no evaluative comment.
Level 1	1-2	<ul> <li>Makes evaluative comments that are generic is statements that would apply to any context that are not supported with evidence / reference to the context.</li> <li>Comments do not stem from a logical chain of reasoning.</li> </ul>
Level 2	3-4	<ul> <li>Provides evaluative comments that are supported by logical chains of reasoning, including appropriate reference to the context.</li> <li>The evaluation is balanced and considers the broad elements of the question, ie takes into account more than one point of view and the range of points considered essential to fully address the question, and / or is critical of the evidence.</li> </ul>

(d) With reference to Fig 1 and Extract B, discuss the extent to which competition is likely to create
efficiency.

Question Number	Answer	Mark
6(d)	Knowledge 2, Application 2, Analysis 4 Evaluation 4	
	Example Model Answer:	
	Efficiency can take many forms, including allocative, productive, dynamic and the reduction of X-inefficiency. (Kn) Competition between firms in a market economy can take the form of price and non-price based activity. (Kn) This market activity typically strives to secure greater market share, and therefore greater market influence and control. (Kn)	
	In the UK retail grocery market, competition, especially from the convenience and low prices offered by the new and growing online sector, has meant that incumbent firms, such as the big four (Tesco, Asda, Sainsbury's and Morrisons), may have to alter their objectives and behaviour. (Ap) The online grocery retail sector is predicted to grow significantly between 2015 and 2020 in the UK, whilst the domain of the big four grocers, the superstore, and the smaller supermarket, is predicted to fall in terms of market share (Figure 1). (Ap)	
	This means that if the big four grocers are going to be able to maintain their growth potential against the competition of the convenience and low prices offered by the new and growing online outlets, such as Amazon Fresh, they will need to increase their efficiency and invest more heavily in an online product. The change in behaviour will be an attempt to maximise their online share, and drive down their costs in order to be in a position to remain competitive in terms of a relevant offer, and the ability to charge low prices. (Ap. An)	
	The cost savings that firms like Tesco will need to undertake will represent greater efficiency. This is because productive efficiency exists when a firm operates at the minimum of its average costs, (where marginal cost equals average cost). (Kn) Competitive pressure will drive each firm towards this position of greater efficiency in order to survive. (An)	
	Similarly, competition between firms will result in prices being driven down towards marginal cost. This creates greater allocative efficiency, towards where equilibrium occurs and where price (average revenue) equals marginal cost. (An)	
	X-inefficiency occurs when firms become wasteful and complacent about managing costs effectively, often due to the absence of effective competition. (Ap) The introduction of significant competition, such as Amazon Fresh in the grocery retail market, creates the need for incumbent firms to reduce X-inefficiency in order to survive. (An)	
	The following diagram uses the benchmark of a perfectly competitive market in order to demonstrate the (greatest degree of the) three forms of efficiency created.	



Level	Mark	Descriptors for Knowledge, Application and Analysis
	0	Gives a completely inaccurate response.
Level 1	1-2	• Shows discrete or imprecise knowledge and understanding of economic terms, concepts, theories or models, ie knowledge and understanding is considered in isolation and lacks exactness and accuracy of expression or detail.
		• Uses generic or irrelevant information or examples, ie information and examples that could apply to any context or that are not relevant to the context / question.
		Gives a descriptive response - there are no chains of reasoning evident / links made between causes and effects.
Level 2	3-5	• Shows elements of knowledge and understanding of economic principles, concepts, theories or models.
		• Applies economic knowledge and understanding to economic problems in context, but does not focus on the broad elements of the question ie the answer may stray from the question set.
		<ul> <li>Gives a narrow or unbalanced response - chains of reasoning are developed, but only one point of view is considered.</li> </ul>
Level 3	6-8	Demonstrates accurate knowledge and understanding of economic principles, concepts, theories or models.
		• Applies appropriate economic knowledge and understanding to the context / precise question set, using relevant examples, which are fully integrated.
		<ul> <li>Provides a wide and balanced response - logical and coherent chains of reasoning are developed, and more than one point of view is considered.</li> </ul>

Level	Mark	Descriptors for Evaluation
	0	Makes no evaluative comment.
Level 1	1-2	<ul> <li>Makes evaluative comments that are generic is statements that would apply to any context that are not supported with evidence / reference to the context.</li> <li>Comments do not stem from a logical chain of reasoning.</li> </ul>
Level 2	3-4	<ul> <li>Provides evaluative comments that are supported by logical chains of reasoning, including appropriate reference to the context.</li> <li>The evaluation is balanced and considers the broad elements of the question, ie takes into account more than one point of view and the range of points considered essential to fully address the question, and / or is critical of the evidence.</li> </ul>

(e) With reference to Extract C, discuss the economic costs and benefits of monopoly as a market structure.

Question	Answer	Mark
Number 6(e)	Knowledge 3, Application 3, Analysis 3 Evaluation 6	
	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) taking supernormal profits from the market. (Kn)	
	Assuming the monopolist aims to maximise profits, the potential price and output decisions of a firm, such as Amazon, considered by some to have a monopoly in the e-books market, can be illustrated in the diagram below.	
	Cost and revenue MC	
	Monopoly price Competitive price	
	Cost MR AR	
	Q Quantity	
	The monopoly price will be relatively high because of the strength of the firm's market power. (Ap, An)	
	With respect to output, the monopolist's profit maximising level of output, at this price, would be restricted and relatively low at Q (Ap). The monopoly market structure would also lack both productive and allocative efficiency. This is because the monopolist would neither produce at the minimum of their average cost curve nor where the price they charge (AR) equals the marginal cost (MC) of the output they produce. (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 the monopolistic market structure is deemed to have significant and undesirable economic costs. (An)	(9)

The extent to which these costs outweigh the potential benefits that a monopolist, such as Amazon, is able to confer on the market, depends on a number of factors	
In practical terms, Amazon has a monopoly in the e-books market (25% rule). However, the price that Amazon chooses to charge is closer to the competitive price in the diagram. This is below the monopoly price by a distance $A - C$ . (Ev) The benefit of this choice is that this achieves allocative efficiency. This is because the price charged (AR) equals the marginal cost (MC) of production, at point B, and greater output will be demanded and produced at this price. In this sense, the benefit is substantial to the wider economy in terms of the efficient resource allocation. (Ev)	
According to Extract C, a monopolist such as Amazon, reinvests its profits into innovation rather than putting them (exclusively) in the hands of its investors. This decision is potentially a benefit of this market structure because it will reduce the average costs of production in the long run, (ie the dynamic efficiency discussed below). (Ev) This is likely to move the firm towards a situation of productive efficiency, which brings benefits in terms of efficient resource allocation to the wider economy. (Ev)	
The investment in innovation by firms such as Amazon also brings dynamic efficiency to an economy, in a way that is unlikely under other market structures, where supernormal profits are typically smaller and temporary. (Ev) Dynamic efficiency is particularly beneficial over the longer term because consumer welfare is also increased as product development and quality enhance the consumer offer, with the added benefit of prices which are lower and	
also remain low. (Ev)	(6)

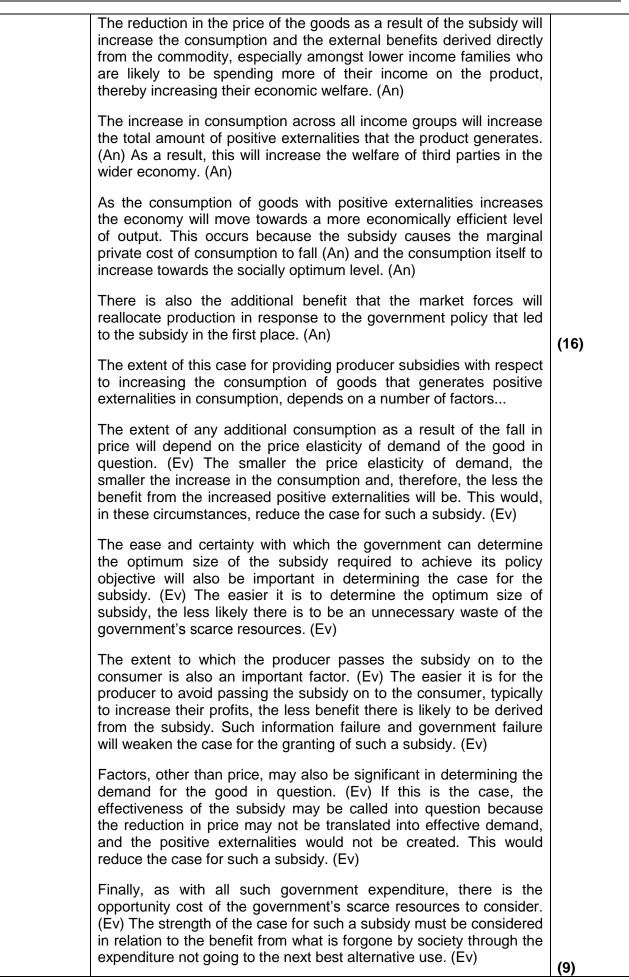
Level	Mark	Descriptors for Knowledge, Application and Analysis
	0	Gives a completely inaccurate response.
Level 1	1-3	<ul> <li>Shows discrete or imprecise knowledge and understanding of economic terms, concepts, theories or models, ie knowledge and understanding is considered in isolation and lacks exactness and accuracy of expression or detail.</li> <li>Uses generic or irrelevant information or examples, ie information and examples that could apply to any context or that are not relevant to the context / question.</li> <li>Provides a descriptive response - there are no chains of reasoning evident / links made between causes and effects.</li> </ul>
Level 2	4-6	<ul> <li>Shows elements of knowledge and understanding of economic principles, concepts, theories or models.</li> <li>Applies economic knowledge and understanding to economic problems in context, but does not focus on the broad elements of the question ie the answer may stray from the precise question set.</li> <li>Gives a narrow or unbalanced response - chains of reasoning are evident but are not fully developed, or only one point of view is considered.</li> </ul>
Level 3	7-9	<ul> <li>Demonstrates accurate knowledge and understanding of economic principles, concepts, theories or models.</li> <li>Accurately selects and applies appropriate economic knowledge and understanding to the context / precise question set, using relevant examples, which are fully integrated.</li> <li>Provides a wide and balanced response - logical and coherent chains of reasoning are developed, and more than one point of view is considered.</li> </ul>

Level	Mark	Descriptors for Evaluation
	0	Makes no evaluative comment.
Level 1	1-2	<ul> <li>Makes evaluative comments that are generic, ie statements that would apply to any context that are not supported with evidence / reference to the context.</li> <li>Comments do not stem from a logical chain of reasoning.</li> </ul>
Level 2	3-4	<ul> <li>Makes evaluative comments that are supported with evidence / reference to the context.</li> <li>Comments are supported by a partially developed chain of reasoning, but do not take into account more than one point of view.</li> </ul>
Level 3	5-6	<ul> <li>Provides evaluative comments that are supported by a logical chain of reasoning, including appropriate reference to the context.</li> <li>The evaluation is balanced and considers the broad elements of the question, ie takes into account more than one point of view and the range of points considered essential to fully address the question, and / or is critical of the evidence.</li> </ul>

## SECTION C

7 Evaluate the extent to which a case can be made for subsidies to be provided to producers of goods that generate positive externalities in consumption.

Question Number	Answer	Mark
7	Knowledge 4, Application 4, Analysis 8, Evaluation 9	
	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 possible 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) It is not always the case, however, that the granting of a subsidy will lead to an increase in the consumption of the goods to which the subsidy is targeted, in line with the value of the positive externality generated. (Kn)	
	The diagram below illustrates the likely effect of the introduction of a producer subsidy on a good with a positive consumption externality. The effect of the subsidy is to cause the supply curve to shift to the right $S_1$ to $S_2$ with the new equilibrium at $E_2$ . (Ap) This will cause a reduction in the equilibrium market price from $P_1$ to $P_2$ (Ap) and an increase in the equilibrium quantity traded to from $Q_1$ to $Q_2$ . (Ap) This will lead to an increase in total consumer welfare. (Ap)	
	Price	
	$P_1$ $P_2$ $P_2$ $P_1$ $F_1$ $F_2$	
	O Q <sub>1</sub> Q <sub>2</sub> Quantity	
	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. (An)	



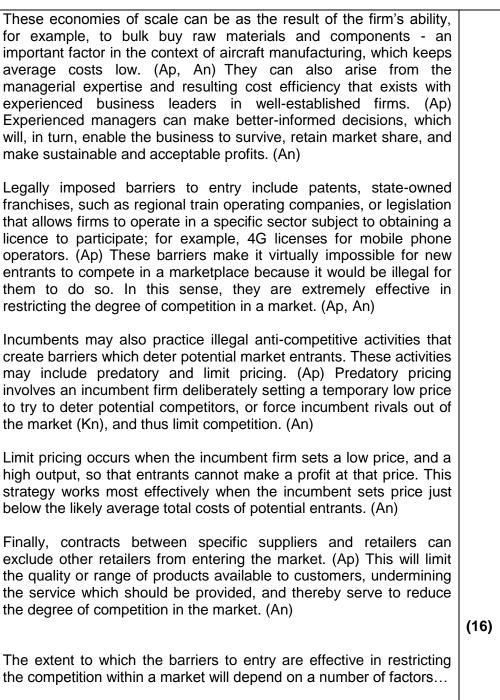
Level	Mark	Descriptors for Knowledge, Application and Analysis
LEVEI	0	<ul> <li>Gives a completely inaccurate response.</li> </ul>
Level 1	1-4	<ul> <li>Gives a completely inaccurate response.</li> <li>Shows discrete or imprecise knowledge and understanding of economic terms, concepts, theories or models, ie knowledge and understanding is considered in isolation and lacks exactness and accuracy of expression or detail.</li> <li>Uses generic or irrelevant information or examples, ie information and</li> </ul>
		<ul> <li>examples that could apply to any context or that are not relevant to the context / question.</li> <li>Provides a descriptive response - there are no chains of reasoning evident / links made between causes and effects.</li> </ul>
Level 2	5-8	<ul> <li>Shows elements of knowledge and understanding of economic principles, concepts, theories or models.</li> <li>Applies economic knowledge and understanding to economic problems in context, but does not focus on the broad elements of the question ie the applies may atrax from the question set.</li> </ul>
		<ul> <li>answer may stray from the question set.</li> <li>Gives a narrow or unbalanced response ie chains of reasoning are superficial, two stage only, or only one point of view is considered.</li> </ul>
Level 3	9-12	<ul> <li>Demonstrates accurate knowledge and understanding of economic principles, concepts, theories or models.</li> <li>Applies economic knowledge and understanding directly to the precise question set, with evidence integrated into the answer.</li> <li>Demonstrates clear and coherent analysis, with developed chains of reasoning, but may only consider one point of view.</li> </ul>
Level 4	13-16	<ul> <li>Demonstrates precise knowledge and understanding of economic principles, concepts, theories or models.</li> <li>Accurately selects and applies economic knowledge and understanding to address the economic issues and problems raised in the context / question, with appropriate evidence and examples fully integrated into the answer.</li> <li>Demonstrates relevant and focused analysis that considers more than one point of view, with logical and coherent chains of reasoning.</li> </ul>

Level	Mark	Descriptors for Evaluation			
	0	Makes no evaluative comment.			
Level 1	1-3	<ul> <li>Makes evaluative comments that are generic, ie statements that would apply to any context that are not supported with evidence / reference to the context.</li> <li>Comments do not stem from a logical chain of reasoning.</li> </ul>			
Level 2	4-6	<ul> <li>Makes evaluative comments that are supported with evidence / reference to the context.</li> <li>Comments / judgements are not fully substantiated - they are supported by a <b>partially</b> developed chain of reasoning, and do not take into account more than one point of view.</li> </ul>			
Level 3	7-9	<ul> <li>Provides evaluative comments that directly address the question and are supported with evidence, including appropriate reference to the context.</li> <li>Comments / judgements are fully substantiated - they are supported by a logical and relevant developed chain of reasoning, and take into account more than one point of view, including the range of points considered essential to fully address the question, and / or are critical of the evidence presented, and / or the assumptions underlying the analysis, enabling informed judgements to be made.</li> </ul>			

8 Barriers to entry in the aircraft manufacturing market are extremely high and will prove a challenge, for example, to Chinese firms hoping to break into commercial aircraft manufacturing.

Evaluate the extent to which barriers to entry can determine the degree of competition in a market.

Question Number	Answer	Mark
(8)	Knowledge 4, Application 4, Analysis 8 Evaluation 9	
	Example Model Answer	
	A barrier to entry is an obstacle that can 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, the greater the degree of competition, and therefore the lower the prices and the better the products. (Ap) Competition itself can have a number of meanings. Most commonly it can be determined by the number of firms in an industry. (Kn) Alternatively, it can be seen as the ease with which that number can increase or decrease.	
	The most common barriers to entry include high sunk costs that are irretrievable (Kn) The specific nature of the business itself, can also create barriers to entry. (Kn) Both of these types of barrier are classed as structural. (Kn)	
	A natural monopoly occurs when the most efficient number of firms in the industry is one. (Kn) The natural monopoly will often have very high fixed costs that act as a barrier to entry. (Ap) This means that it is impractical in terms of cost and efficiency to have more than one firm operating in the industry. Hence, the high barriers to entry determines that there will be no effective natural competition in the market. (An)	
	Legally imposed barriers that allow a firm to operate with limited competition, or even illegal anti-competitive practices, are examples of deliberate barriers to entry. (Kn) All of these barriers will effectively reduce the degree of competition in the market. (Ap)	
	Sunk costs include, amongst others, advertising costs and the recruitment and training costs associated with a firm's workforce. These sunk costs, once incurred cannot be recovered. (Kn) If these costs are particularly high, for example, in established and specialised markets such as aircraft manufacturing, then they can act as a significant deterrent to new entrants, as they weigh up the significant risks associated with entering and competing in the market. In this way, competition in the market is reduced. (Ap, An)	
	The nature of the business itself can cause barriers to entry to exist. If there is the potential for significant economies of scale which incumbents are already exploiting, then new entrants will be deterred from entering and contesting the market. This is because, with initially low production volumes, they will not be able to compete with existing cost structures in the industry. (Ap, An)	



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 competition. (Ev) This will be particularly important where the incumbents are complacent and have failed to invest in research and development. As a result, entry by an innovative firm will be considered less risky.(Ev)

Moreover, there are a number of markets, such as fast food restaurants and hairdressing, that do not incur substantial sunk costs, and therefore these are not a deterrent to competition in those markets. (Ev)

43

In a similar fashion, not all markets have significant economies of scale for new entrants to overcome. (Ev) Some industries have a relatively low minimum efficient scale that is easily achievable, even for new entrants to the market who will typically have a low market share. (Ev)	
A patent is a significant deterrent to market entrants where one is granted. However, most patents have a maximum life of 20 years so there may be an opportunity for new firms to enter the market once the product has reached a level of maturity. This means the degree of competition will increase and the market will become contestable in the longer term. (Ev) On the other hand, in practice, given the pace of product research and innovation, and ever-changing tastes and preferences, this opportunity to compete later may be unattractive. (Ev)	
The extent to which predatory and limit pricing will be effective in deterring new market entrants, will depend on the entrant's ability to withstand the short-term losses that they will face. (Ev) If they have the financial capacity to compete with incumbent firms at below average costs, without the need to shut down, in other words the low market price covers average variable costs and makes at least some contribution to fixed costs, then the barrier to entry will not necessarily reduce the degree of competition. (Ev)	
Where exclusive contracts exist between suppliers and retailers 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 contest the market. (Ev)	
The potential entrant could also make recourse to the Competition and Markets Authority, which, in the event of the contractual practices being deemed illegal, could grant access to the supplier for the new entrant. (Ev) In either case, the barrier to entry would be less effective in restricting the degree of competition. (Ev)	(9)

Level	Mark	Descriptors for Knowledge, Application and Analysis				
	0	Gives a completely inaccurate response.				
Level 1	1-4	<ul> <li>Shows discrete or imprecise knowledge and understanding of economic terms, concepts, theories or models, ie knowledge and understanding is considered in isolation and lacks exactness and accuracy of expression or detail.</li> <li>Uses generic or irrelevant information or examples, ie information and examples that could apply to any context or that are not relevant to the context / question.</li> <li>Provides a descriptive response - there are no chains of reasoning</li> </ul>				
		evident / links made between causes and effects.				
Level 2	5-8	<ul> <li>Shows elements of knowledge and understanding of economic principles, concepts, theories or models.</li> <li>Applies economic knowledge and understanding to economic problems in context, but does not focus on the broad elements of the question ie the answer may stray from the question set.</li> <li>Gives a narrow or unbalanced response ie chains of reasoning are superficial, two stage only, or only one point of view is considered.</li> </ul>				

Level 3	9-12	<ul> <li>Demonstrates accurate knowledge and understanding of economic principles, concepts, theories or models.</li> <li>Applies economic knowledge and understanding directly to the precise question set, with evidence integrated into the answer.</li> <li>Demonstrates clear and coherent analysis, with developed chains of reasoning, but may only consider one point of view.</li> </ul>
Level 4	13-16	<ul> <li>Demonstrates precise knowledge and understanding of economic principles, concepts, theories or models.</li> <li>Accurately selects and applies economic knowledge and understanding to address the economic issues and problems raised in the context / question, with appropriate evidence and examples fully integrated into the answer.</li> <li>Demonstrates relevant and focused analysis that considers more than one point of view, with logical and coherent chains of reasoning.</li> </ul>

Level	Mark	Descriptors for Evaluation				
	0	Makes no evaluative comment.				
Level 1	1-3	<ul> <li>Makes evaluative comments that are generic, ie statements that would apply to any context that are not supported with evidence / reference to the context.</li> <li>Comments do not stem from a logical chain of reasoning.</li> </ul>				
Level 2	4-6	<ul> <li>Makes evaluative comments that are supported with evidence / reference to the context.</li> <li>Comments / judgements are not fully substantiated - they are supported by a <b>partially</b> developed chain of reasoning, and do not take into account more than one point of view.</li> </ul>				
Level 3	7-9	<ul> <li>Provides evaluative comments that directly address the question and are supported with evidence, including appropriate reference to the context.</li> <li>Comments / judgements are fully substantiated - they are supported by a logical and relevant developed chain of reasoning, and take into account more than one point of view, including the range of points considered essential to fully address the question, and / or are critical of the evidence presented, and / or the assumptions underlying the analysis, enabling informed judgements to be made.</li> </ul>				

					1
Question	AO1	AO2	AO3	AO4	Total
1 a	1	1			2
1 b		1			1
1 c	1		1		2
2 a	2	2			4
2 b		1			1
3 a	1				1
3 b	1	1			2
3c	1	1			2
4 a		1			1
4 b	1		1		2
4 c	1	1			2
5 a	2	1	1		4
5 b	1				1
Total Section A	12	10	3	0	25
6 a	1	1	3		5
6 b	2	2		2	8
6 C	2	2	2	4	10
6 d	2	2	4	4	12
6 e	3	3	3	6	15
Total Section B	10	10	14	16	50
7 or 8	4	4	8	9	25
Total Section C	4	4	8	9	25
Total All Sections	26	24	25	25	100

## Assessment Objective Grid PRACTICE PAPER 1