PEARSON EDEXCEL A-LEVEL ECONOMICS A · 9EC0

ECONOMICS



EXAM QUESTION PACK

1.2 HOW MARKETS WORK

SCORE	PERCENTAGE
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Questions

Q1.

Extract A

West End ticket prices reach all time high

The price of West End theatre tickets in London has reached an all-time high. In the past year alone, up to January 2013, the average top-price ticket has risen by almost £10 and now stands at £81.05. In January 2013, London theatres announced record numbers of people wanting to buy tickets for shows. Costs of running the theatres have also risen because there are restoration costs to pay and energy costs have increased. This rise in costs is despite some of the theatres in the West End receiving subsidies.

(Source: adapted from 'West End theatre tickets more expensive than ever, says The Stage,' by Matt Trueman, *The Guardian*, 5 April 2013 http://www.theguardian.com/stage/2013/apr/05/west-end-ticket-price-discrepancy)

(a) Explain why the price of 'the average top-price ticket has risen by almost £10' (Extract A, line 2). Use a supply and demand diagram in your answer.

(5)

Extract B

Cineworld merger with Cinema City International (CCI)

The UK's biggest cinema chain by market share is to enter seven overseas markets through a £900m merger. Cineworld announced that it has agreed to merge with CCI which owns 100 multiplex cinemas in seven countries Bulgaria, Czech Republic, Hungary, Israel, Poland, Romania and Slovakia. The deal is expected to be promoted as a merger of equals although Cineworld is larger than its new partner. The planned merger with CCI follows a fall of 1% in the revenue earned by cinemas in the UK and Ireland in 2013 to £1.17bn.

In 2013, Cineworld was ordered by competition regulators to sell three cinemas following its takeover of the Picturehouse chain. This underlined the difficulty of finding new growth opportunities in the company's home market, which was one factor prompting a search for international expansion opportunities.

Cineworld's UK-based rivals have also grown overseas, with Odeon UCI having a presence in seven countries, while Canadian-owned Vue Entertainment has cinemas in Portugal, Taiwan, Germany and Denmark.

The combined group is to be run by CCI's chief executive, although other senior management will be drawn from the ranks of both companies and the board will have more Cineworld board members.

(Source: adapted from 'Cineworld Targets Europe With £900m Merger,' By Mark Kleinman, Sky News, 9th January 2014 http://news.sky.com/story/1192823/cineworld-targets-europe-with-900m-merger)

(b) Examine **two** reasons Cineworld plans to merge with CCI.

(8)

Adult (19–59 yrs)	£9.60
Child (2–14 yrs)	£6.80
Student (15–18 yrs)	£7.30
Senior (60+ yrs)	£7.30
Family of 4	£29.80

Figure 1

Cineworld (London) cinema ticket prices after 5pm

(c) With reference to Figure 1, discuss the likely impact of price discrimination on Cineworld's profit. Include an appropriate diagram in your answer.

(12)

(d) Apart from price discrimination, assess **one** pricing and **one** non-pricing strategy Cineworld could adopt to increase sales.

(10)

Extract C

Cineworld investigation by Competition Commission (competition regulator)

Cineworld had to sell cinemas in three towns after the Competition Commission (CC) concluded that its acquisition of the Picturehouse chain would lead to higher prices for customers in Aberdeen, Bury St Edmunds and Cambridge. While Cineworld operates mainly in large out-of-town-centre cinemas, Picturehouse's cinemas tend to be smaller and located in city centres.

The CC has concluded that the acquisition could lead to a substantial lessening of competition in the cinema market in Aberdeen, Bury St Edmunds and Cambridge – where Cineworld and Picturehouse face limited competition.

(Source: http://www.competition-commission.org.uk/media-centre/latest-news/2013/aug/cineworld-could-have-to-sell-cinemas)

(e) Discuss the likely impact of 'a substantial lessening of competition in the cinema market in Aberdeen, Bury St Edmunds and Cambridge' (Extract C, line 6–7).

(15)

(Total for question = 50 marks)

Q2.

At the start of the 2012–13 football season the average ticket price in the top four English football leagues increased by 11%. During the 2012–13 season attendance fell 5%.

(Source: http://www.espn.co.uk/football/sport/story/237339.html)

(a) With reference to the data provided, calculate the price elasticity of demand for football tickets in the English football leagues. You are advised to show your working.

(2)

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(b) Derby County Football Club has found that the price elasticity of demand for their tickets is −0.3. Demand for their tickets is:

(1)

A perfectly price elastic

B perfectly price inelastic

C relatively price elastic

D relatively price inelastic

Answer

(c) Given the price elasticity of demand for Derby County Football Club's tickets, explain the likely impact on their revenue of an increase in ticket prices.

(2)

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(Total for question = 5 marks)

Q3.

The following table shows gross weekly earnings and annual new car registrations between 2011 and 2013.

Year	Gross weekly earnings (£)	Annual new car registrations (millions)
2011	500.7	1.94
2012	506.1	2.04
2013	517.5	2.26

(Sources: http://www.ons.gov.uk/ons/rel/ashe/annual-survey-of-hours-and-earnings/2013-provisional-results/stb-ashe-statistical-bulletin-2013.html#tabEarnings-trends)
(http://www.smmt.co.uk/2014/11/new-car-registrations-october-2014/)

(a) Calculate the income elasticity of demand for new cars between 2011 and 2013.
You are advised to show your working.

(2)

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(b) This data suggests that new cars are:

(1)

A an inferior good with relatively income inelastic demand

B an inferior good with relatively income elastic demand

C a normal good with relatively income inelastic demand

D a normal good with relatively income elastic demand

Answer ☐

The IMF forecast that the average income in the UK will grow by 2.4% in 2014 and that the growth rate will slow to 2.2% in 2015.

(Source: http://www.imf.org/external/pubs/ft/weo/2014/update/01/)

(c) Explain the likely impact of this forecast change in average incomes on new car sales.

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(Total for question = 5 marks)

Q4.

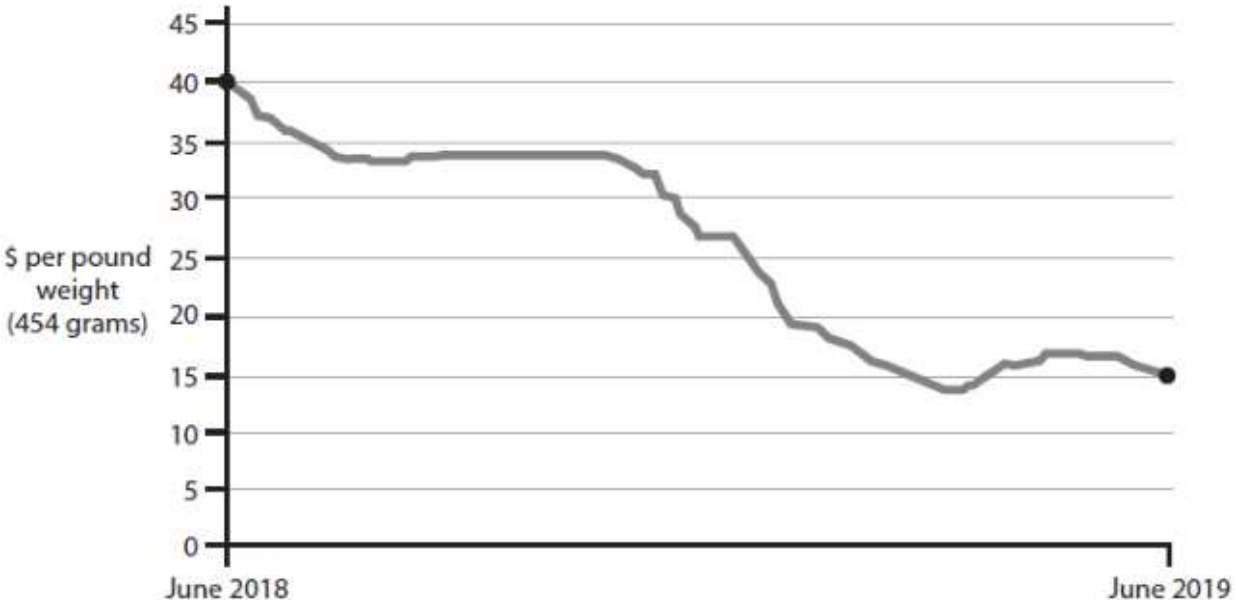
Use the data to support your answers where relevant. You may annotate and include diagrams in your answers.

Answer the question with a cross in the box you think is correct ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

Cobalt is a key metal used in the batteries of electric cars. China is the world's largest producer of electric cars but has recently cut subsidies to its manufacturers.

The Democratic Republic of the Congo (DRC) produces more than 60% of the world's supply of cobalt, from its small-scale mines. Many new small mines opened in 2018 as a result of improved expectations of profit.

The following graph shows the price of cobalt between June 2018 and June 2019.



(a) With reference to the information provided, draw a supply and demand diagram to show why the price of cobalt fell between June 2018 and June 2019.

(4)

(b) Between June 2018 and June 2019 the price of cobalt fell by:

(1)

☒ **A** 25%

☒ **B** 37.5%

☒ **C** 62.5%

☒ **D** 166.7%

(Total for question = 5 marks)

Q5.

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

In 2016 the average energy bill per household was £1 070 per year, excluding VAT, an indirect tax charged at 5%.

(Source: adapted from ©Crown Copyright https://www.ofgem.gov.uk/publications-and-updates/infographic-bills-prices-and-profits)

(a) The amount of VAT paid per year from energy bills by an average household in 2016 was:

(1)

☒ **A** £53.50

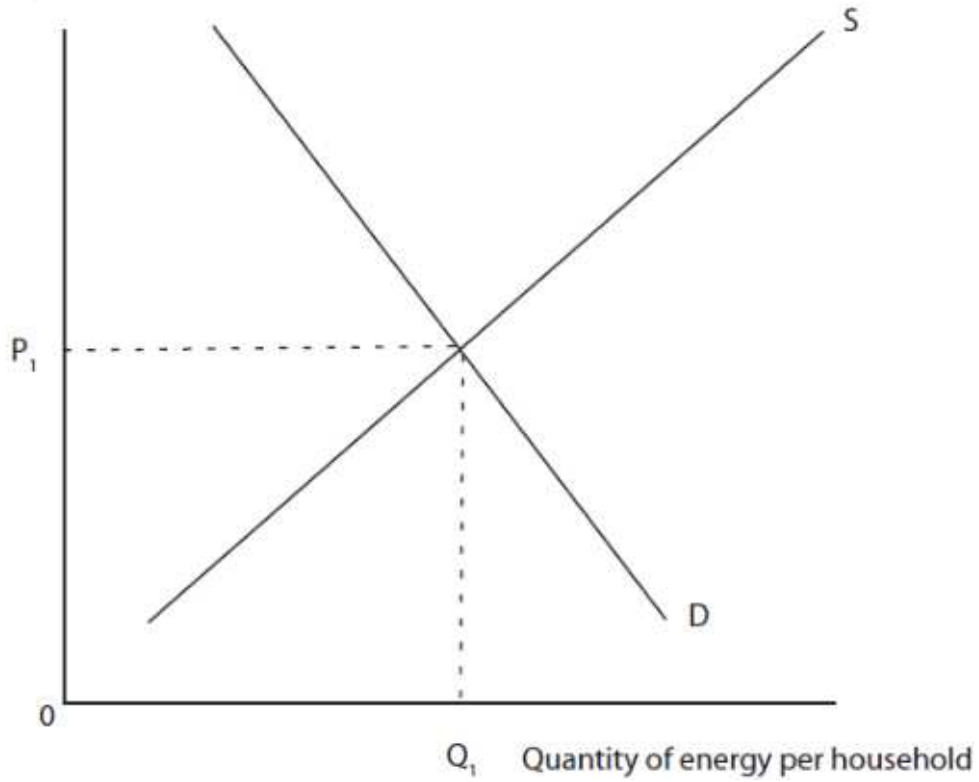
☒ **B** £214.00

☒ **C** £1 019.00

☒ **D** £1 123.50

(b) On the diagram below annotate the effect of a rise in VAT on the market for household energy use.

(2)



(c) Define the term 'indirect tax'.

(1)

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(Total for question = 4 marks)

Q6.

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

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

diagrams in your answers.

Disney+ is a streaming service that distributes films and television series produced by the Walt Disney Studios.

	Disney+ subscribers (million)
November 2019	10
December 2019	26.5
February 2020	28.6
April 2020	50

(Source adapted from: https://www.businessofapps.com/data/disney-plus-statistics/)

(a) *Ceteris paribus*, the most likely consequence of the above data is that Disney+ will experience an increase in its:

(1)

☒ **A** fixed costs

☒ **B** income elasticity of demand

☒ **C** price elasticity of demand

☒ **D** revenue

(b) Draw a supply and demand diagram to show the likely effect of the change in the number of subscribers on the market equilibrium for Disney+ services.

(4)



(Total for question = 5 marks)

Q7.

Answer the question with a cross in the box you think is correct ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

Patrick Street Productions produces musicals. Its latest production is 'It's a Wonderful Life' and the total cost of this production is $200 000. The ticket price is $40. The theatre has a capacity of 300 seats. The company aims for revenue maximisation. If this is achieved, revenue from ticket sales will cover 30% of total costs. Charitable donations contribute 12.5% towards total cost and a government subsidy ensures the production covers all of its costs.

(Source adapted from: https://www.cbc.ca/news/canada/british-columbia/a-bit-of-a-desperate-time-as-costs-rise-professional-theatre-companies-survive-rather-than-thrive-1.5489733)

(a) Calculate the total revenue from ticket sales for 'It's a Wonderful Life', assuming it is shown only five times, all at full capacity. You are advised to show your working.

(2)

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(b) Calculate the value of the government subsidy necessary for this production to cover all of its costs.

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(c) Which **one** of the following conditions is necessary for revenue maximisation to occur?

(1)

☒ **A** Average revenue equals average cost

☒ **B** Average revenue equals marginal cost

☒ **C** Marginal revenue equals average revenue

☒ **D** Marginal revenue equals zero

(Total for question = 5 marks)

Q8.

The number of individual weekly ticket sales from UK National Lottery games operated by Camelot was 73 million in the financial year 2015–2016.

The sale price of each lottery ticket was £2. This figure included 24 pence of tax revenue on each ticket sold.

(a) Calculate the weekly revenue received by Camelot after paying the tax to the government. You are advised to show your working.

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Research conducted for HMRC estimated the cross elasticity of demand for using gaming machines to be 1.28 in response to changes in the price of national lottery tickets.

(Source: https://www.gov.uk/government/uploads/system/uploads/ attachment_data/file/322845/report313.pdf)

In October 2013 Camelot increased the price of a national lottery ticket from £1 to £2.

(b) Explain the likely impact of the price increase of national lottery tickets on the demand for using gaming machines.

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In 2016 a coastal flood defence scheme was completed at Broomhill Sands in Kent, protecting people, homes and businesses. A £30 million grant from the National Lottery paid for the scheme.

(Source: https://www.gov.uk/government/news/30-millionproject- set-to-reduce-flood-risk-in-kent)

(c) The most likely reason for this grant is to ensure the:

(1)

☒ **A** exclusivity of Broomhill Sands

☒ **B** provision of a private good

☒ **C** provision of a public good

☒ **D** rivalry of Broomhill Sands

(Total for question = 5 marks)

Q9.

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

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

The table below shows data on the drinks market in Chile in 2017.

Price elasticity of demand for sweetened drinks	–1.37
Cross price elasticity of demand for bottled water in response to a price change in sweetened drinks	+0.63

(Source: adapted from https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-017-4098-x)

(a) The price of sweetened drinks increases by 5%. *Ceteris paribus*, calculate the percentage change in the quantity demanded for sweetened drinks. You are advised to show your working.

(2)

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(b) The price of sweetened drinks increases by 5%. *Ceteris paribus*, calculate the percentage change in the quantity demanded for bottled water. You are advised to show your working.

(2)

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(c) Using the data above, which **one** of the following is most likely?

(1)

		A decrease in the price of sweetened drinks will have the following effect on revenue:	Sweetened drinks and bottled water are:
☒	**A**	Decrease	Complements
☒	**B**	Decrease	Substitutes
☒	**C**	Increase	Complements
☒	**D**	Increase	Substitutes

(Total for question = 5 marks)

Q10.

The British Broadcasting Corporation (BBC) is a TV broadcaster. It is financed through an annual TV licence fee of £145.50. At this fee level many TV owners benefit from consumer surplus.

(a) Define the term 'consumer surplus'.

(1)

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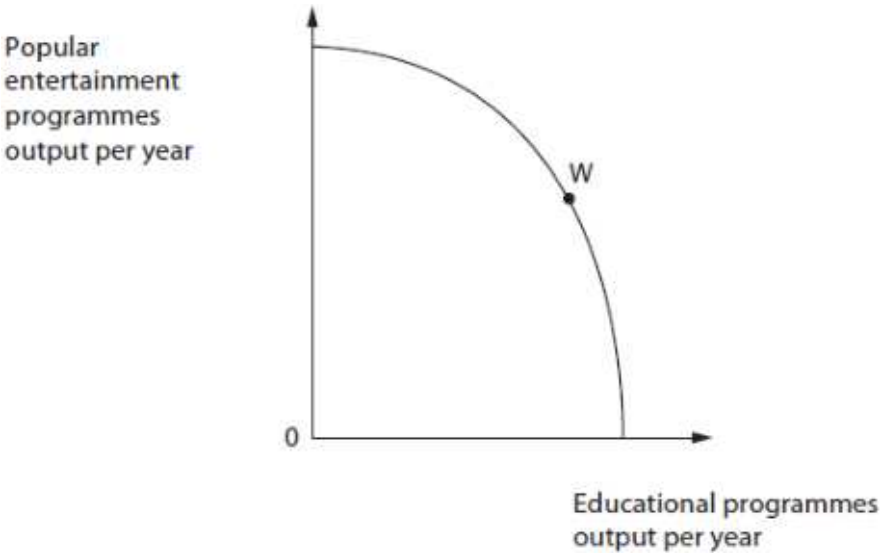
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(b) The diagram shows the production possibility frontier for the BBC. Assuming the BBC is at point W, annotate the diagram to show the opportunity cost of providing more educational programmes.

(2)



(c) BBC programmes are often referred to as being public goods. This is because:

(1)

☒ **A** all BBC programmes are financed by the public sector

☒ **B** the BBC is the most popular broadcaster in the UK

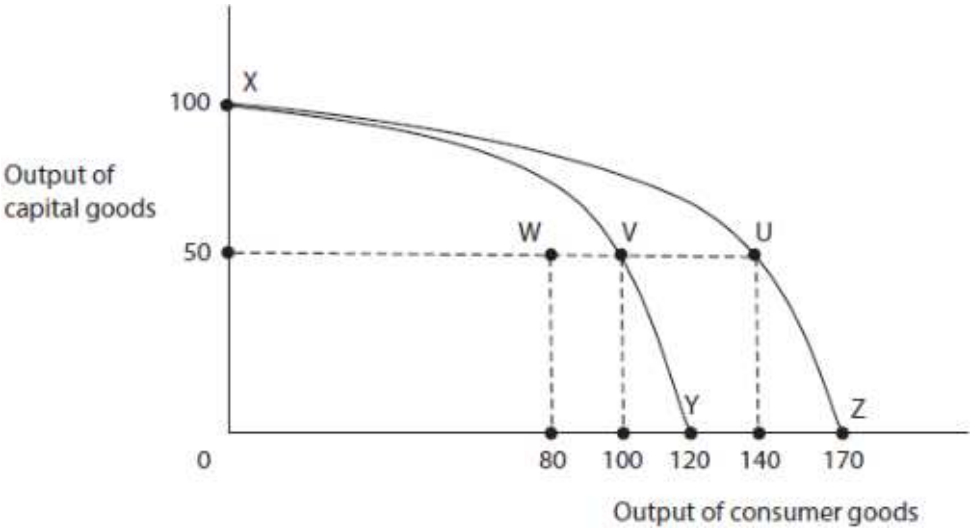
☒ **C** the consumption of these programmes is non-rivalrous

☒ **D** there are external benefits from the consumption of many BBC programmes

(Total for question = 4 marks)

Q11.

The diagram refers to production possibility frontiers for a country that produces capital goods and consumer goods.



Originally, the economy has a production possibility frontier shown by the line **XY**, operating at point **V**. The production possibility frontier then moves to **XZ**, operating at point **U**.

(a) Calculate the **original** and the **new** opportunity cost of producing 50 capital goods. You are advised to show your working.

(2)

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(b) Which **one** of the following was the most likely cause of the movement in the production possibility frontier from **XY** to **XZ**?

(1)

☒ **A** A reduction in unemployment in consumer goods industries

☒ **B** A rise in the cost of producing consumer goods

☒

C An increase in demand for consumer goods

☒ **D** A technological improvement in the production of consumer goods

(c) Explain **one** characteristic of the economy at position **W**.

(2)

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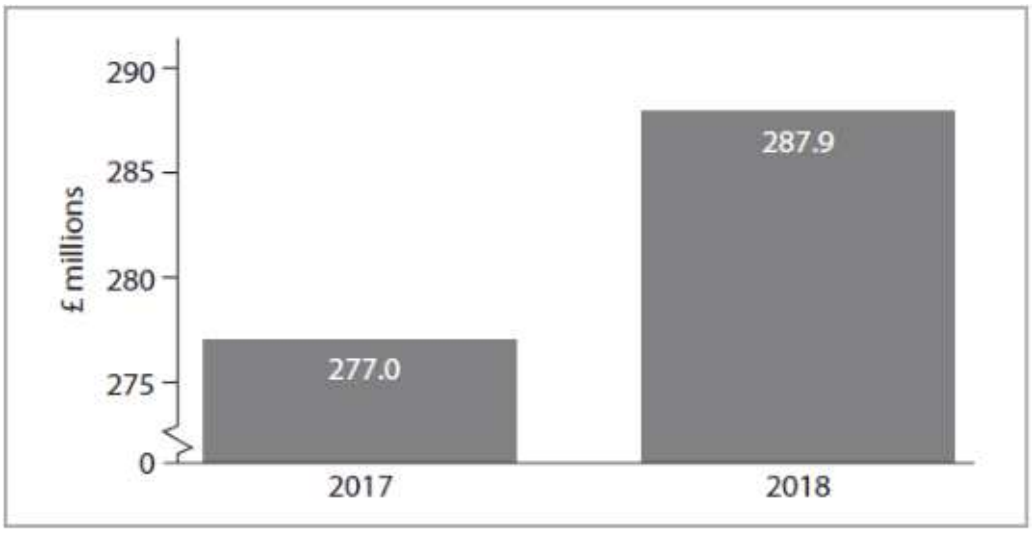
(Total for question = 5 marks)

Q12.

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

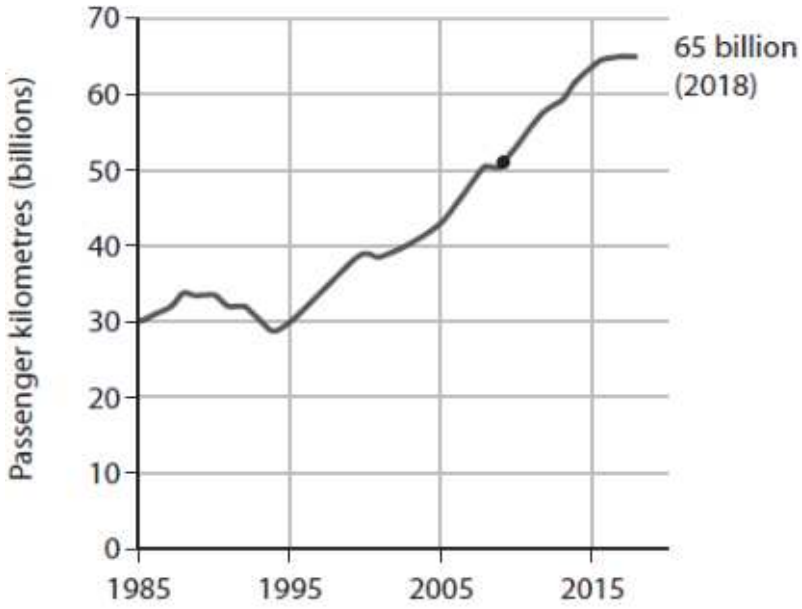
The UK Rail Industry

Figure 1: UK government subsidy to Northern, a train operating company in Northern England



(Source adapted from: https://www.theyworkforyou.com/wrans/?id=2018-10-18.181280.h)

Figure 2: Rail passenger kilometres travelled per year in the UK, billions



(Source adapted from: fullfact.org)

Figure 3: Price of a single off-peak train journey, Edinburgh to Leeds Saturday 22nd December 2018 19:00 hours

Adult	Young Persons (16–25) Railcard
£105.30	£69.50

(Source: https://www.lner.co.uk/buy-tickets/booking-engine)

Extract A

The case for nationalisation

Privatisation has not made the rail industry cheaper to operate, despite the promise from one government source that it would see private companies bringing: "more competition, greater efficiency and a wider choice of services".

One reason, suggest the critics, is fragmentation. Instead of pushing British Rail into the private sector as a single supplier the government chose to break it into three components of track, train operators and rolling stock i.e. the trains and carriages. This has encouraged each part of the rail industry to prioritise its own profits rather than collaborating to improve the system.

Privatisation, meanwhile, never really worked. The rail network of 2 500 stations and 32 000 km of tracks was renationalised in 2001. This has encouraged the government's transport secretary, a supporter of private sector involvement, to argue that the state Network Rail monopoly should be removed so that companies can bid to build new rail lines to upgrade the railway.

The privately-owned train operators are now the subject of fierce criticism, due to overcrowding and cancelled services. Private companies are supposed to compete to win a bid to be the train operator for a region for a short number of years. However in recent years the number of private companies bidding or renewing their contract as rail operators has fallen. In May 2018 the government rescued the East Coast line by renationalising it. The line had been run by the private rail operator Virgin Rail, which was suffering lower passenger numbers and revenue than forecast.

Some argue that there is a simple solution: reunite track and train in the only feasible manner, nationalisation.

(Source adapted from: https://www.ft.com/content/d82848ca-f7ba-11e7-88f7-5465a6ce1a00)

Extract B

Southern Rail boss paid £495 000

The Chief Executive of Southern Rail, the private-sector train operator that has become associated with delays, losses, cancellations and strikes, was paid £495 000 last year. This increased calls for nationalisation and a maximum wage for executives at companies with government contracts. In contrast the average base pay for a train driver in the UK is £47 705, although they can earn up to £63 000.

Nearly a third of Southern Rail trains were late in 2016 as it tried to deal with a labour dispute that involved extensive strike action. The rail trade unions are opposed to planned changes to the role of train guards, which they claim will put passenger safety at risk.

(Source adapted from: Rob Davies, The Guardian 10 April 2017
https://www.theguardian.com/business/2017/apr/10/southern-rail-boss-double-pay-rise)

(a) Refer to Figure 1. Explain the likely effect of the change in subsidy levels between 2017 and 2018 on rail fares.

Include a supply and demand diagram in your answer.

(5)

(b) With reference to Figure 2, examine **two** possible factors which may have influenced demand for rail travel since 2008.

(8)

(c) Assess whether complete nationalisation of the rail industry might protect employees.

(10)

(d) With reference to Extract A, paragraph 3, discuss whether the rail network can be considered to be a natural monopoly.

(12)

(e) Discuss the likely benefits of price discrimination to rail passengers. Use a diagram to support your answer.

(15)

(Total for question = 50 marks)

Q13.

In February 2016 the Daily Mail newspaper increased its price from 60p to 65p.
By August 2016 its sales had fallen by 5.41%.

(a) Ceteris paribus, calculate the price elasticity of demand for the Daily Mail newspaper over this period. You are advised to show your working.

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(b) Which **one** of the following is most likely to be a determinant of price elasticity of demand for the Daily Mail newspaper?

(1)

☒ **A** Availability of rival newspapers

☒ **B** Change in population size

☒ **C** Decrease in the cost of producing the Daily Mail newspaper

☒ **D** Expected rise in the price of the Daily Mail newspaper

(c) Define the term 'ceteris paribus'.

(1)

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(Total for question = 4 marks)

Q14.

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

Answer the question with a cross in the box you think is correct ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

(a) The income elasticity of demand for bus travel is estimated to be –1.5.

This implies that:

(1)

☒ **A** a 10% increase in fares will lead to a 15% decrease in passengers

☒ **B** as unemployment falls, more people will use buses

☒ **C** bus travel has a negative cross elasticity of demand compared to rail travel

☒ **D** bus travel is an inferior good

(b) Explain why a firm might try to reduce the price elasticity of demand for its products.

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(Total for question = 4 marks)

Q15.

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

	2015	2017
Average weekly pocket money for children aged under 10 years	£7	£8.75

In the UK, Freddo is a popular chocolate snack bought by children who are under 10 years old. Freddo's income elasticity of demand is estimated to be –0.1.

(a) Calculate the percentage change in quantity demanded for Freddos between 2015 and 2017, ceteris paribus:

(1)

☒ **A** –0.8%

☒ **B** –2%

☒ **C** –2.5%

☒ **D** –25%

(b) Explain **one** reason why the income elasticity of demand is significant to the producer of Freddos.

(3)

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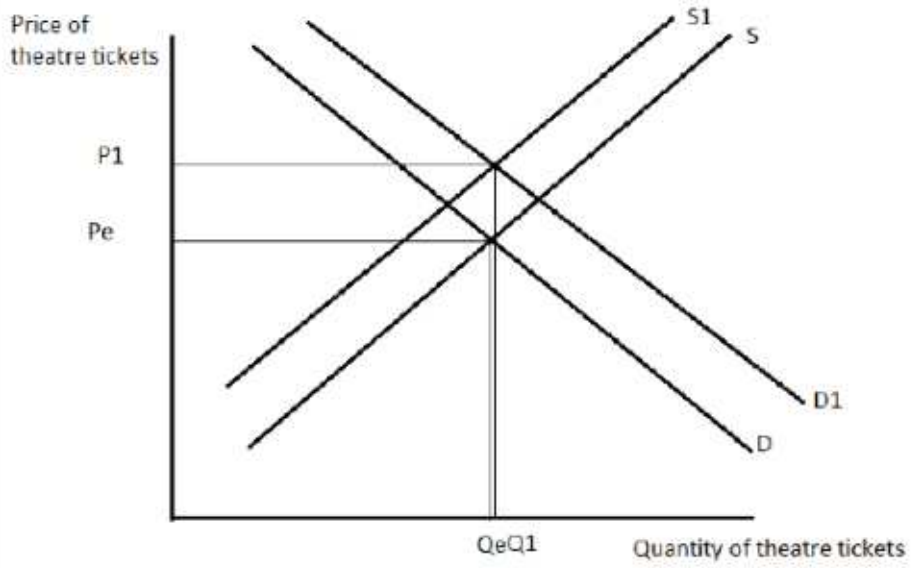
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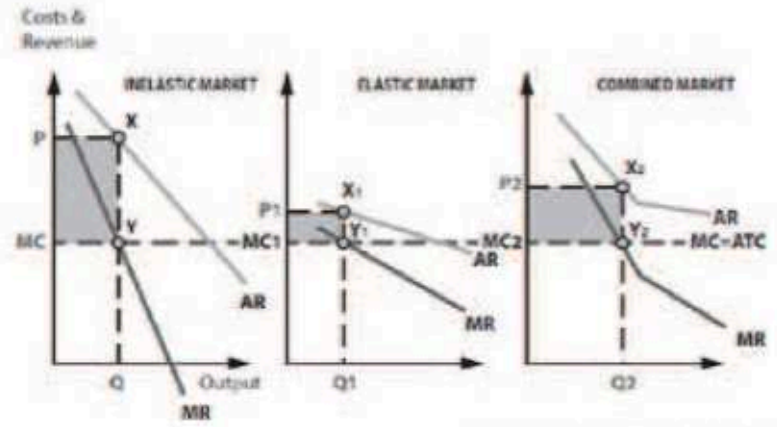
(Total for question = 4 marks)

Mark Scheme

Q1.

Question Number	Answer	Mark
(a)	**Knowledge 1, Application 1, Analysis 3** **Knowledge/understanding:** 1 mark for: • accurate supply and demand with original equilibrium. (1) **Application:** 1 mark for identifying either: • record numbers of people wanting to buy tickets for shows (1) • costs of running the theatres has risen to pay for restoration and absorb the cost of booking fees. (1) **Analysis:** 1 mark for each of the following: • supply shifted leftwards (1) • demand shifted rightwards (1) • accurate new equilibrium showing higher price. (1) For example:  	(5)

Question Number	Answer	Mark
(b)	**Knowledge 2, Analysis 2, Application 2, Evaluation 2** **Knowledge/understanding:** 2 marks for identification of two reasons (1+1). **Analysis:** 2 marks for linked explanation of these reasons (1+1). **Application:** 2 marks for reference to the data (1+1), e.g. • to enter seven overseas markets (1) – including Bulgaria, Czech Republic, Romania, Hungary, Israel, Poland, Romania and Slovakia/ operates almost 100 multiplexes (1) which increases the quantity of potential consumers (1) • to establish a European mulitplex powerhouse (1) – CCI operates almost 100 multiplexes (1) which increases the quantity of potential consumers at each location (1) • Cineworld was ordered by competition regulators to offload three cinemas following its takeover of the Picturehouse chain (1). Difficulty of finding new growth opportunities in the company's home market (1) so moving abroad enables expansion (1) • industry data by Rentrak showing that UK and Ireland box office takings in 2013 fell by 1% to £1.17bn (1) falling demand in UK (1) and markets in Europe may be growing (1) • rivals have also grown overseas, with Odeon UCI and Vue Entertainment (1) and this suggests is a rational decision for the business to make (1) as their competitors are likely to have moved to maximise profits. (1) **Evaluation:** 2 marks for two evaluative comments, e.g. • however, some of the countries they are moving to are poorer than the UK (1) • even in these countries they will be scrutinised by EU regulation (1) OR 2 marks for identification and linked development e.g. • magnitude of fall in cinema sales – fall 1% (1) could just be a bad year for films (1) • unlikely to want to copy them (1) it is more the impact on their competitors' profitability they are concerned about. (1)	**(8)**

Question Number	Indicative content	Mark
(c)	**Knowledge 2, Application 2, Analysis 4** • Define price discrimination. • Application- same screening but different prices – examples from data. • Third degree price discrimination diagram.  (Source: www.economicsonline.co.uk) • If they do not discriminate and MR=MC profit is P2MC2Y2X2. • Adults – demand more inelastic so willing to pay more and respond less as price rises. • Children – demand more responsive to change in price – elastic. • If firms splits up the market and charges different prices to each group the area of profit PMCYX and P1MC1YX1 will be greater than if do not discriminate. • Profits will rise if they price discriminate depending on different groups elasticities.	**(8)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–2	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	3–5	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response; chains of reasoning are developed but the answer may lack balance.
Level 3	6–8	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Indicative content	Mark
(c) continued	**Evaluation 4** • Cost to administer and to ensure people buy only appropriate tickets is expensive. • Assumes they know shapes of demand curves for each group – which they may not. • Even within sub groups very different markets with different sensitivities to price – so could increase profits further with other discrimination. • Ethics/fairness of price discrimination. • Magnitude of price variations – £6.80-9.60. • Depends on proportion of earnings from tickets – other earning (popcorn etc) may be more significant. • Cutting costs may have more of an impact on increasing profits than changing price and revenue.	**(4)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/ reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation recognises different viewpoints and/or is critical of the evidence.

Question Number	Indicative content	Mark
(d)	**Knowledge 2, Application 2, Analysis 2** • Define price and non-price competition. • Identify relevant price and non-price strategies suitable for Cineworld. • Application – competitors such as Odeon and Vue cinema. **Benefits and limitations of each can be taken as Knowledge, Application and Analysis, or Evaluation** • Price wars – lowering the price to attract customers from competition – increasing sales. • Predatory pricing – where a firm prices below AVC/AC of competitors – enables competitors to be driven out of the market and increases sales enabling the firm to drive up prices later. • Price leadership – where Cineworld sets its price first in order for competitors to follow – leading price may enable the firm to under-cut competitors for a time or push up the price as competitors follow. • Limit pricing – keep price low – to avoid firms contesting/entering market – lower price means higher output and sales, lack of competition means less fierce advertising and price reduction needed. **Types of non-price competition** • Advertising – this will raise awareness, interest, desire and action to increase sales of cinema tickets. • Branding – investing in the image, logo, slogan of the business – to build trust amongst customers.	**(6)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–2	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no link between causes and consequences.
Level 2	3–4	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response or the answer may lack balance.
Level 3	5–6	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are applied appropriately to the broad elements of the question.

Question Number	Indicative content	Mark
(d) continued	**Evaluation 4** • Price wars – competitors may lower the price also meaning customers are the only ones to benefit, profit margins fall. • Predatory pricing – could get into legal trouble for trying to shut down competitor, if they have reserves they could last a long time driving down your own profits/ reserves. • Price leadership – Cineworld may increase price but competitors may not. • Limit pricing – low price means higher output but lower revenue and profit as not profit maximising. **Types of non-price competition** • Advertising – this will cost money, and may just encourage competitors to do the same making it more costly to remain in market. • Branding – may be a waste of funds as it may not encourage trust or brand loyalty. **Other evaluation** **Game theory** • Competitors likely to react and adjust price or advertising budgets/so could end up with both with lower price or higher costs in terms of advertising budget. • Pay off matrix may be used to show worst outcome for all. • Magnitude – depends on amount of price adjustment and advertising budget. • Prioritisation of the significance of each factor – whether pricing and non-price will be most important • Short run little change – people do not adjust to price changes straight away/long run may take time for benefits to emerge, e.g. branding.	**(4)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/ reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation recognises different viewpoints and/or is critical of the evidence.

Question Number	Indicative content	Mark
(e)	**Knowledge 3, Application 3, Analysis 3** • Competition Commission (CC) concluded merger would lead to higher prices for customers in Aberdeen, Bury St Edmunds and Cambridge. • Diagram, e.g. monopoly or comparing monopoly and perfect competition. • Increased producer surplus/decreased consumer surplus – fairness. • Deadweight loss from monopolist. • Lack of productive efficiency/allocative efficiency (P>MC). • X-inefficiency/organisational slack.	**(9)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–3	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	4–6	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response; chains of reasoning are developed but the answer may lack balance.
Level 3	7–9	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

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Question Number	Indicative content	Mark
(e) continued	**Evaluation 6** • Cineworld operates mainly large out-of-town-centre cinemas, Picturehouse's cinemas tend to be smaller cinemas located in city centres – not direct competitors. • Other indirect competitors – bowling etc. • Dynamic efficiency, increased profits may be used to innovate. • National pricing operated where it is the same for all locations. • Management monitored by head office so unlikely to develop X-inefficiency. • May revenue maximise or sales maximise due to divorce of ownership.	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/ reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evidence of evaluation of alternative approaches which is unbalanced. Evaluative comments with supporting evidence/reference to context and a partially–developed chain of reasoning.
Level 3	5–6	Evaluative comments supported by relevant chain of reasoning and appropriate reference to context. Evaluation recognises different viewpoints and/or is critical of the evidence.

Q2.

Question Number	Answer	Mark
(a)	**Application 2** **Application:** 1 mark for applying the formula and 1 mark for correct answer • Calculate the PED 5/11 (1) = 0.4545 (1) NB if the answer given is 0.4545 award 2 marks.	**(2)**

Question Number	Answer	Mark
(b)	D	**(1)**

Question Number	Answer	Mark
(c)	**Knowledge 1, Analysis 1** **Knowledge/understanding:** 1 mark for identifying the impact of the change in price and quantity **Analysis:** 1 mark for linking this to overall impact on total revenue, e.g. • relatively inelastic demand so additional revenue earned from additional price will be greater than lost revenue due to lost quantity (1) so as price rises total revenue rises (1) • may be illustrated diagrammatically – showing total revenue rising as price rises (1) with inelastic demand. (1)	**(2)**

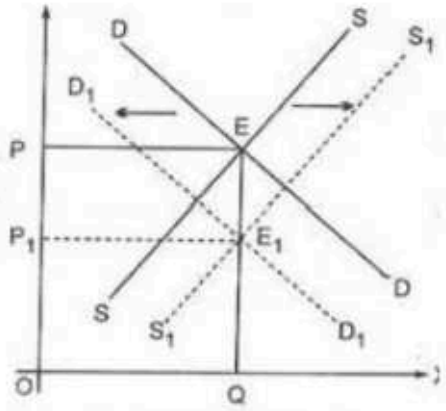
Q3.

Question Number	Answer	Mark
(a)	**Application 2** **Application:** 1 mark for calculating both the percentage change in quantity or the percentage change in earnings. 1 mark for correct answer Percentage change in quantity = 0.32/1.94 x 100 = 16.5 (1) And Percentage change in earnings = 16.8/500.7 x 100 = 3.4 (1) YED = 16.5/3.4 = 4.9 (1) NB if the answer given is 4.8 to 5 award 2 marks.	**(2)**

Question Number	Answer	Mark
(b)	D	**(1)**

Question Number	Answer	Mark
(c)	**Knowledge 1, Analysis 1** **Knowledge/understanding:** 1 mark for identifying the impact of the increased income on increasing new car sales **Analysis:** 1 mark for link to slowing growth and how the rate car sales grow will slow, e.g. • New car sales will increase in each of the years (1) but the rate at which they increase will slow (1).	**(2)**

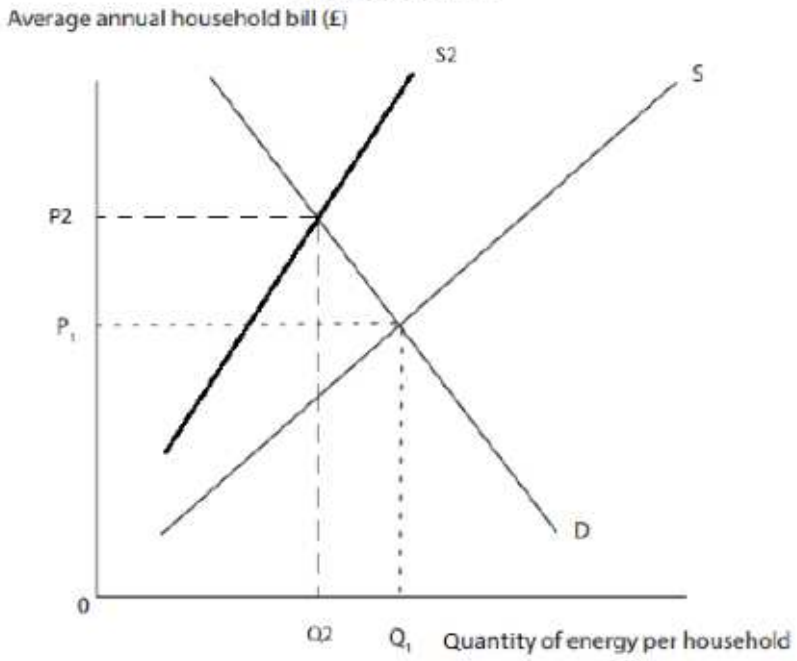
Q4.

Question Number	Answer	Mark
(a)	**Knowledge 2, Application 2** **Knowledge** • Supply and demand diagram annotated to show: a right shift in the supply curve (1) and a left shift in the demand curve (1) **Application** • New lower price (1) • New equilibrium price at D1 and S1 as illustrated below, for example (1)  	**(4)**

Question Number	Answer	Mark
(b)	**Knowledge 1** **The only correct answer is C** ***A*** *is not correct because they have mistakenly only calculated the change in price as a percentage change* ***B*** *is not correct because they have mistakenly calculated -the new price divided by the original price initially* ***D*** *is not correct because they have mistakenly calculated the change in price by the new price.*	**(1)**

Q5.

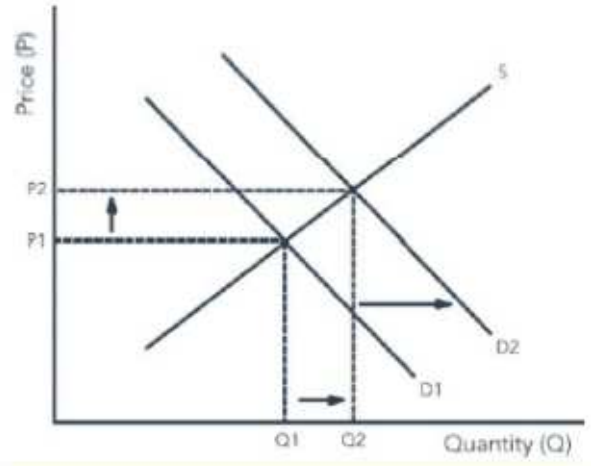
Question Number	Answer	Mark
(a)	**Application 1** **The only correct answer is A** ***B*** *is not correct because the candidate has mistakenly divided 1070 by 0.5* ***C*** *is not correct because the candidate has mistakenly multiplied 1070 by 1.005* ***D*** *is not correct because the candidate has mistakenly multiplied 1070 by 1.05*	**(1)**

Question Number	Answer	Mark
(b)	**Application 2**  1 mark for skewed (pivoted) leftward shift of supply curve 1 mark for new equilibrium **NB if a parallel leftward shift of supply with correct new equilibrium maximum 1 mark**	**(2)**

Question Number	Answer	Mark
(c)	**Knowledge 1** **Knowledge** 1 mark for definition, e.g. an indirect tax is imposed on producers (suppliers) by the government (1) tax on good or service which is added to their price (1) tax on consumer expenditure (1)	**(1)**

Q6.

Question Number	Answer	Mark
(a)	**Analysis 1** **The only correct answer is D** ***A*** *is not correct because fixed costs are not related directly with output in the short-term* ***B*** *is not correct there is no information available on income changes* ***C*** *is not correct because there is no information available on price changes*	**(1)**

Question Number	Answer	Mark
(b)	**Knowledge 2, Application 2** **Knowledge** - Correctly labelled original demand and supply (1) annotated to show the demand curve shifted to the right (1) **Application** **As a result of demand shifting right:** – Price increase (1) – Output increase (1) – Original and new equilibrium points identified (1+1) ALLOW horizontal supply Award a maximum of three marks if supply also shifts Diagram e.g.  	**(4)**

Q7.

Question Number	Answer	Mark
(a)	**Application 2** **Application:** 1 mark for likely understanding e.g. • $40 x 300 seats (1) **OR** • $12 000 per show (1) **OR** • $12 000 x 5 (1) Answer = **$60 000** **Award 2 marks for correct answer (60 000)**	(2)

Question Number	Answer	Mark
(b)	**Application 2** **Application:** 1 mark for understanding e.g. • Subsidy is 57.5% (1) **OR** • 100% - 30% (tickets sales) – 12.5% (charitable donations) **OR** • 57.5% x $ 200 000 (1) **OR** • 0.575 x 200 000 (1) Answer = **$115 000** **Award 2 marks for correct answer accept a range (114 000 – 116 000)**	(2)

Question Number	Answer	Mark
(c)	**Analysis 1** **The only correct answer is D** ***A*** *is not correct because this is sales maximisation* ***B*** *is not correct because this is identifying allocative efficiency* ***C*** *is not correct because this is describing perfect competition market structure.*	(1)

Q8.

Question Number	Answer	Mark
(a)	**Application 2** **Application:** 1 mark for appropriate calculation e.g. £2 ×73 million = £146 million (1) **OR** £0.24 ×73 million = £17.52 million (1) **OR** £1.76 ×73 million (1) **OR** correct answer with no millions (1) Answer = **£128.48 million** (accept between £128 million and £129 million) **Award 2 marks for correct answer (128m)**	**(2)**

Question Number	Answer	Mark
(b)	**Knowledge 1, Analysis 1** **Knowledge:** 1 mark for e.g. • The demand for use of gaming machines is likely to increase (1) • It is a substitute for national lottery tickets (1) • Substitutes have a positive cross elasticity of demand (1) **Analysis:** 1 mark for e.g. • Increase by 128% in response to a 100% increase in the price of national lottery tickets (1) • 1.28 cross elasticity of demand indicates they are **close** substitutes (1)	**(2)**

Question Number	Answer	Mark
(c)	**The only correct answer is C** ***A*** *is not correct because the flood defence scheme is non-exclusive* ***B*** *is not a private good because flood defence scheme is non-exclusive so you are unable to charge private individuals that benefit from the scheme* ***D*** *is not correct because it is a distractor in lacking meaning but also indicating that the candidate is confusing rivalry with the non-rivalrous nature of public goods*	**(1)**

Q9.

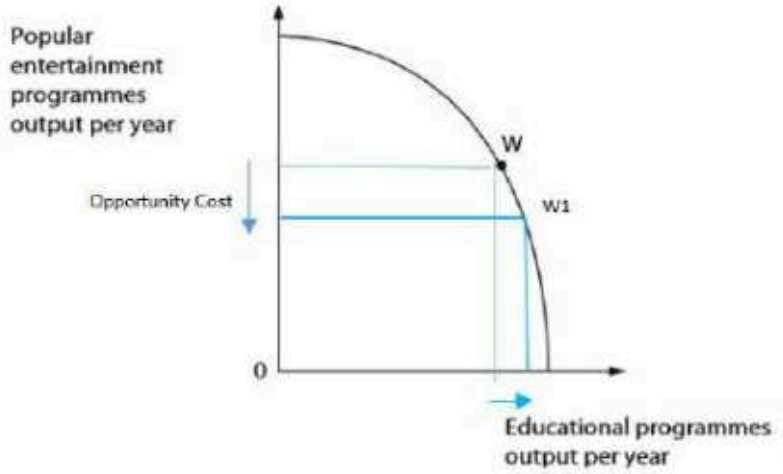
Question Number	Answer	Mark
(a)	**Application 2** **Application:** 1 mark for likely understanding e.g. • 5% x -1.37 (1) **OR** • 5 % x 1.37 (1) Answer = - **6.85%** **Award 2 marks for correct answer (accept any in the range of 6.8 to 7 or -6.8 to -7)**	**(2)**

Question Number	Answer	Mark
(b)	**Application 2** **Application:** 1 mark for likely understanding e.g. • 5% x 0.63 (1) **OR** • 5% x -0.63 (1) **OR** Answer = **3.15%** **Award 2 marks for correct answer (accept any in the range of 3 to 3.2)**	**(2)**

Question Number	Answer	Mark
(c)	**Knowledge 1** **The only correct answer is D** ***A*** *is not correct because demand is price-elastic and XED is positive (substitute)* ***B*** *is not correct because demand is price-elastic and XED is less than +1* ***C*** *is not correct because XED is positive (substitute)*	**(1)**

Q10.

Question Number	Answer	Mark
(a)	**Knowledge 1** **Knowledge/understanding** 1 mark for definition, e.g. • Measure of the welfare (utility) that people gain from consuming goods and services • Difference between the total amount that consumers are willing and able to pay and the total amount that they actually pay. • Diagram showing area under the demand curve and above the market equilibrium price.	**(1)**

Question Number	Answer	Mark
(b)	**Application 2** **Application** 2 marks for, e.g. An additional point to the right of W indicating movement of resources towards educational programmes (1) and the resulting opportunity cost, showing a fall in output of popular entertainment programmes (1). The following diagram earns 2 marks:  	**(2)**

Question Number	Answer	Mark
(c)	**The only correct answer is C** ***A*** *is not correct because this is providing an example of government finances rather than being non-excludable or non-rivalrous as a definition of a public good.* ***B*** *is not correct because this is confusing popularity with public goods, rather than being non-excludable or non-rivalrous as a definition of a public good.* ***D*** *is not correct because this is confusing benefits to third parties as members of the public rather than being non-excludable or non-rivalrous as a definition of a public good.*	**(1)**

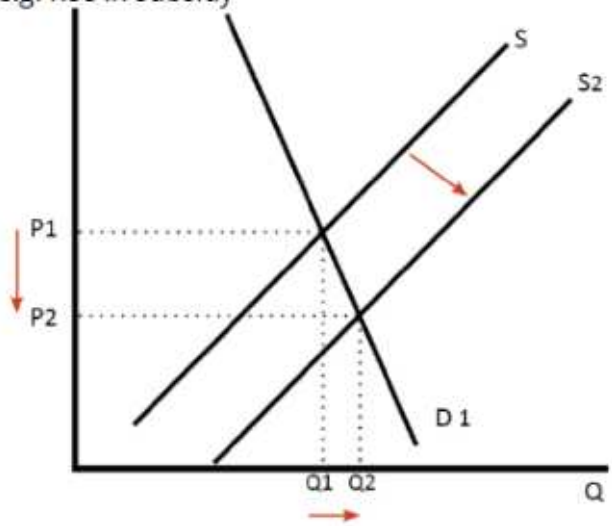
Q11.

Question Number	Answer	Mark
(a)	**Application 2** **Application:** Calculation of original opportunity cost of producing 50 capital goods is 120 -100=**20** consumer goods. (1 mark) Calculation of new opportunity cost of 50 capital goods is 170 -140=**30** consumer goods. (1 mark)	**(2)**

Question Number	Answer	Mark
(b)	**The only correct answer is D** ***A*** *is not correct because this would be describing a change in actual output such as W to V from inside the PPF XY* ***B*** *is not correct because PPF shows potential output and not the cost of output* ***C*** *is not correct because PPF shows potential output and not the demand for a good or service*	**(1)**

Question Number	Answer	Mark
(c)	**Knowledge 1, Analysis 1** **Knowledge/understanding:** 1 mark for e.g. Position **W** represents an • inefficient allocation of resources (1) • unemployment of resources (1) **Analysis:** 1 mark for e.g. • It is possible to increase output of both consumer goods and capital goods by using unemployed resources (1) • The economy could produce at either 100 or 140 consumer goods but is currently producing 80 (1) • The country is operating inside the PPF (1)	**(2)**

Q12.

Question Number	Answer	Mark
(a)	**Knowledge 1, Application 1, Analysis 3** **Knowledge and Analysis:** (up to 4 marks) Correctly labelled diagram annotated to show a shift right in the supply curve (2) e.g. rise in subsidy  **NB: also accept a double shift right indicating an increase in subsidy.** **NB: also accept a rise in price, given prices annually linked to RPI, but less than it would have been.** **NB: 2 KAA marks are reserved for an accurate diagram**	

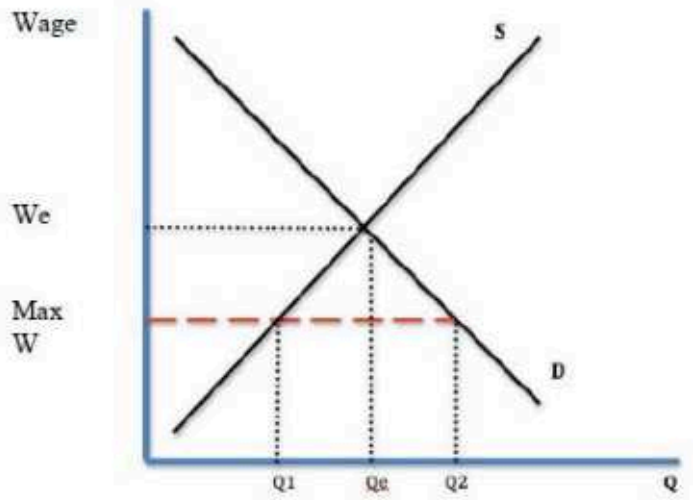
	Explanation that subsidy increase is a rise in financial assistance OR cut in cost of production OR additional cash grant (2) Explanation that decreasing costs borne by producers is passed on to consumers as a fall in rail fares OR excess supply results in fall in rail fares (2) **Application:** 1 for reference to Figure 1 e.g. subsidy rises around £11 million (1) subsidy rises from £277 million to £287.9 million (1) subsidy increased by 3.9% (1)	**(5)**

Question Number	Answer	Mark
(b)	**Knowledge 2, Analysis 2, Application 2, Evaluation 2** **Knowledge/understanding:** 2 marks for identification of two non price determinants (1+1) e.g. • Change in taste and preference/quality of service • Changes in income • Price of substitute has risen/substitute less attractive • Price of complement has fallen/complement more attractive • Increased population/migration • Lower price in real terms • Lower prices – special offers/off-peak/forward booking.	
	Analysis: 1 mark for linked explanation of each identified determinant to demand increasing/shifting right (this may be shown on a diagram) (1+1) Increase in population moved to commuter areas/improvement in rail stock e.g. wifi access. Income elasticity of demand Close substitute e.g. car travel, XED >+1 Close complement e.g. on-board meal, XED >-1 **Application:** 2 marks for reference to Figure 2 (1+1) or other data (1), e.g. • Approximately 50 billion rail passenger kilometres per year (1) to 65 billion (1) or increased by 15 billion rail passenger kilometres per year (2) or Increased by 30% (2) • Economic recovery post 2008 crisis (1) • Cost of car travel/road congestion (1) • Quality of train meals/on board Wi-Fi access (1)	

	Evaluation: 2 marks for two evaluative comments, OR 2 marks for identification and linked development of one evaluative comment, evaluating significance of factors or another reason as a counter-argument e.g. • Delays and cancellations (1) • Recession 2008- 2010 (1) • Car travel still cheaper/train delays and cancellations (1) • Rail meals expensive/congested trains so can't work on board (1) • Increased home working • Rail fares have risen (1)	**(8)**

Question Number	Indicative content	Mark
(c)	**Knowledge 2, Application 2, Analysis 2** **Positive effect on protection of employees:** • Safety of employees maybe better protected • Trade unions will succeed in securing higher wages in negotiations with government rather than private firms. Rail employees become subject to public sector wage setting. Extension in supply of labour. • Greater job security • Improved integration between state owned rail network and rail operators resulting in rail expansion. • Reduced inequality in pay between employees. • Private sector firms may cut less profitable route whereas government will continue these routes protecting employees **Negative effect on protection of employees:** • 'Maximum wage on executive managers pay' may be implemented – causing shortages with specialist managers • Nationalisation may not 'provide a wider choice'/quality resulting in lower levels of employment • Lack of funds for investment from the government may reduce the long-term attractiveness of railways causing service to be cut in future	

NB: Allow relevant diagram e.g.



NB: Negative effects can be seen as KAA and positive effects as evaluation or vice versa.

NB: for a Level 3 response there must be reference to the context of nationalisation of the rail industry.

NB: for a Level 3 response there must be reference to the effect on employees.

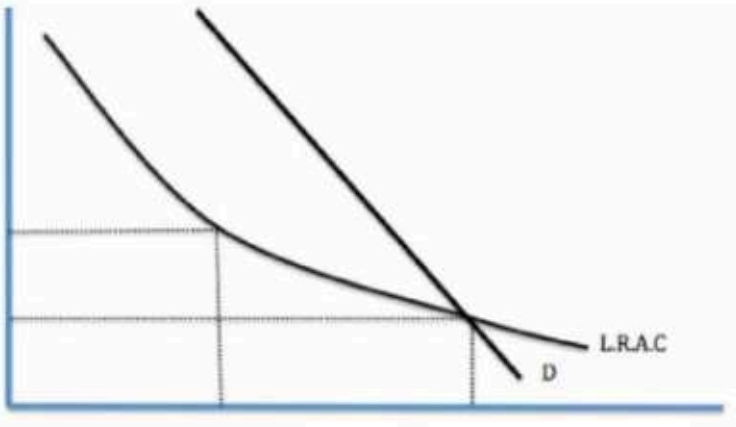
(6)

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	**1–2**	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no link between causes and consequences.
Level 2	**3–4**	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response or the answer may lack balance.
Level 3	**5–6**	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are applied appropriately to the broad elements of the question.

Question Number	Indicative content	Mark
(c) continued	**Evaluation 4** • Limited effect since many train operators such as East Coast now in the public sector • Rail usage which increased under privatisation may decline causing suppliers profits and employees wages to decline • Public or private sector ownership may make no difference to executive managers pay • Wages may not increase faster under state ownership compared to private sector. • Level of personnel could be cut substantially under nationalisation if the government has to make spending cuts. • Wages may not increase faster under state ownership compared to private sector. **NB: Negative effects can be seen as KAA and positive effects as evaluation or vice versa.** **NB: for a Level 2 response there must be reference to employees in context.**	**(4)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	**1–2**	Identification of generic evaluative comments without supporting evidence/ reference to context. No evidence of a logical chain of reasoning.
Level 2	**3–4**	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation recognises different viewpoints and/or is critical of the evidence.

Question Number	Indicative content	Mark
(d)	**Knowledge 2, Application 2, Analysis 4** **Case for rail network being a natural monopoly** • Define natural monopoly • Application – rail network was renationalised in 2001 after privatisation in 1993 promised competition. Need for integrated national rail network of 32 000km for 2 500 stations, requires enormous investment. • Large infrastructure cost means adding one more passenger or one more train means AC continues to fall. • Little additional costs associated with an additional customer or train running. • Operating one rail track minimises average costs, rail network's LRAC continues to fall as high fixed costs associated with laying track and building new stations. • Allocative efficiency is met at close to large share of market demand. Minimum efficiency scale will require large subsidies to fund off peak services and cover losses. • Average cost would be very high for having two or more rail companies with wasteful duplication of multiple tracks – resulting in higher rail fares. • Allow relevant diagram e.g.	

	AC  Output • Only one rail network company can fully exploit large internal economies of scale – technical, commercial, managerial. **NB: Case for can be seen as KAA and positive case against as evaluation or vice versa.**	(8)

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	**1–2**	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	**3–5**	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response; chains of reasoning are developed but the answer may lack balance.
Level 3	**6–8**	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Indicative content	Mark
(d) continued	**Evaluation 4** **Case for rail network not being a natural monopoly** • Government support for competition: "companies can bid to build new rail lines to upgrade the railway." • Train operating companies already compete to run trains on lines • Rail lines and stations could be leased out to competing firms • Potential diseconomies of scale in rail infrastructure – managerial slack, closure of rail lines. • Technological advances may result in competing rail lines. **NB: Case for can be seen as KAA and positive case against as evaluation or vice versa.**	**(4)**

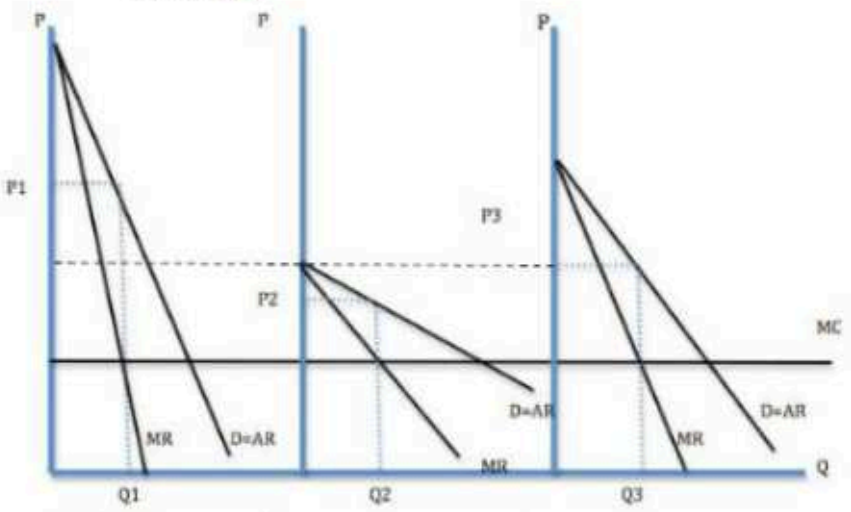
Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	**1–2**	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	**3–4**	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation recognises different viewpoints and/or is critical of the evidence.

Question Number	Indicative content	Mark
(e)	**Knowledge 3, Application 3, Analysis 3** Price discrimination – charging different prices to different groups of consumers for the same service e.g. 16-25 railcard users vs adult fare users. Allow peak and off-peak as service from A to B is the same, price discrimination just provides an incentive to travel slightly later. • **Lower rail fares for 16-25 year olds** Young persons' may increase their consumer surplus as a result – prices may move towards being more allocatively efficient P=MC. May find bargain fares - £35.80 cheaper as in Figure 3. Allows lower income groups to consume service – seek employment. • **More choice for rail travellers**: Price discrimination enables TOCs to make more revenue so they can cross subsidise and provide discount fares for seats that would not have been taken. In some cases without price discrimination rail operators may go out of business – preventing rail travel.	

- **Avoids overcrowding**
  Trail operators can use price discrimination to manage demand, preventing overcrowded train in peak travel times and encouraging rail travel by 16-25 year olds in less popular times off peak.

- **Improved customer service**
  Rail travellers receive a better-quality travelling experience thanks to additional revenue raised through price discrimination. Investment in new trains, station services, online ticketing, customer information, Improved food and drink service, Wi-Fi access, seating and storage space.

- **Price discrimination diagram** showing, for example:
  Market profit maximising price and output P3 and Q3. At which no service would be provided for 16-25 year old customers. Price discrimination enables a lower price of P2 (£69.50) for young persons' – so consumer surplus increases for consumers with relatively more price elastic demand



NB: Other correct diagrams accepted.

NB: For Level 3 a valid diagram such as above is required. Analysis must link to benefits to consumers. Allow other types of rail fare price discrimination e.g advance booking, Senior Railcard, 16-17 year olds half price travel.

(9)

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	**1–3**	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	**4–6**	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response; chains of reasoning are developed but the answer may lack balance.
Level 3	**7–9**	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Indicative content	Mark
(e) continued	**Evaluation 6** • Rail operators are price regulated so not pure price makers • Cuts in number of guards may mean adults travel illegally. • Higher rail fares for adults £105.30 in Figure 3 (£35.80 more than 16-25 year olds) resulting in fall in consumer surplus and less allocatively efficient pricing. Overall consumer surplus may be lower. • Despite price discrimination consumers are suffering train cancellations and government is having to rescue rail operators making large losses. • Overcrowding happens on off peak trains – so government/rail operators have no incentive to continue offering young persons' discount. • Deteriorating customer service despite price discrimination. Rail operators using additional revenue to pay out dividends or executive pay rises. • Are rail operators/government aware of PEDs for different groups of consumers.	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	**1–2**	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	**3–4**	Evidence of evaluation of alternative approaches which is unbalanced. Evaluative comments with supporting evidence/reference to context and a partially-developed chain of reasoning.
Level 3	**5–6**	Evaluative comments supported by relevant chain of reasoning and appropriate reference to context. Evaluation recognises different viewpoints and/or is critical of the evidence.

Q13.

Question Number	Answer	Mark
(a)	**Application 2** **Application** PED = %△Qd/%△P price rise = 5/60 x 100 = 8.3% (1) **or** -5.4%/+8.3% (1) PED = (-)0.65 Award 2 marks for (-)0.65 **NB if answer given is between (-)0.7 and (-)0.6 award 2 marks.**	**(2)**

Question Number	Answer	Mark
(b)	**The only correct answer is A** ***B*** *is not correct because 'population' is a non price determinant of demand not PED determinant* ***C*** *is not correct because 'cost' is a non price determinant of supply not PED determinant* ***D*** *is not correct because 'expected rise in the price' is a non price determinant of demand not PED determinant*	**(1)**

Question Number	Answer	Mark
(c)	**Knowledge 1** **Knowledge/understanding** 1 mark for definition: 'all other things being equal' (1) OR All other factors remain unchanged (1)	**(1)**

Q14.

Question Number	Answer	Mark
(a)	**The only correct answer is D** ***A*** *is not correct because the concept explored is PED not YED* ***B*** *is not correct because as unemployment falls fewer people will use buses* ***C*** *is not correct because XED is concerned with the relationship between complements or substitutes*	**(1)**

Question Number	Answer	Mark
(b)	**Knowledge 1, Application 1 and Analysis 1** **Knowledge/understanding** 1 mark for reason Possible answers include: • Recognition that the lower the PED the less price sensitive the product is (1) quantity demanded does not change significantly with price (1) **Application** • If, for example, a product with a PED of -0.1 had a 10% price rise, sales volume would fall by 1% (ceteris paribus) (1); so the 10% higher price per unit would far outweigh the 1% reduction in units sold (1) **Analysis** • The lower a product's price elasticity, the easier it is to boost revenue by increasing the price (1) if the firm raises its price it will increase the value of its sales (1)	**(3)**

Q15.

Question Number	Answer	Mark
(a)	**Application 1** **The only correct answer is C** ***A*** *is not correct because they may multiplied 8.75 by -0.1* ***B*** *is not correct because they have mistakenly taken 2017 as the original year in the percentage change calculation* ***D*** *is not correct because the percentage change in quantity demanded has not been multiplied by -0.1.*	**(1)**

Question Number	Answer	Mark
(b)	**Knowledge 1, Application 1, Analysis 1** **Knowledge/Understanding** 1 mark for recognition of the effect of a change in income on the demand **Application** 1 mark for application to Freddo, e.g. • YED is negative (1) • Freddos is an inferior good (1) • YED is inelastic **Analysis** 1 mark for linked development, e.g. • Sales revenues fall as incomes rise or • Sales revenue rise when incomes fall • Company should plan to produce less when the economy does well or • Company should plan to produce more when economy/incomes are not growing	**(3)**

Questions

Q1.

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

	2015	2017
Average weekly pocket money for children aged under 10 years	£7	£8.75

In the UK, Freddo is a popular chocolate snack bought by children who are under 10 years old. Freddo's income elasticity of demand is estimated to be –0.1.

(a) Calculate the percentage change in quantity demanded for Freddos between 2015 and 2017, ceteris paribus:

(1)

☒ **A** –0.8%

☒ **B** –2%

☒ **C** –2.5%

☒ **D** –25%

(b) Explain **one** reason why the income elasticity of demand is significant to the producer of Freddos.

(3)

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(Total for question = 4 marks)

Q2.

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

Amazon Prime, Netflix and NowTV all charge £7.99 per month for streaming very similar film and television services.

(a) The most likely cross price elasticity of demand for close substitutes is:

(1)

- ☐ **A** – 2.1
- ☐ **B** – 0.1
- ☐ **C** + 0.1
- ☐ **D** + 2.1

In 2016 the average cinema ticket price in the UK was £7.41, and there were 19.1 million tickets sales. The price elasticity of demand was estimated to be –0.5.

(b) Calculate the new total revenue if prices were raised by 3% in 2017 to £7.63, if everything else remained unchanged. You are advised to show your working.

(3)

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(Total for question = 4 marks)

Q3.

Between 2013 and 2015, median household income in the UK increased from £24 200 to £25 700. Over the same period the demand for bus travel fell by 3%.

(a) Which **one** of the following is the most accurate explanation of the term 'median household income'?

(1)

☒ **A** The difference between the highest level of household income and the lowest level of household income

☒ **B** The middle household income after placing all household incomes in numerical order

☒ **C** The most frequently occurring level of household income

☒ **D** Total household income divided by the number of households

(b) Using the data provided, explain whether bus travel is a normal good or an inferior good.

(3)

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(Total for question = 4 marks)

Q4.

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

The International Energy Agency has predicted that oil use by cars will peak in 2025 because of the increasing number of drivers switching to electric vehicles.

(Source adapted from: https://www.thetimes.co.uk)

Evaluate the likely microeconomic consequences of consumers shifting from vehicles powered by fuel obtained from oil to electric-powered vehicles.

(Total for question = 25 marks)

Q5.

"Since peaking at 132p a litre in July 2014, petrol prices have fallen by 20%".

(Source: adapted from UK petrol prices cut again, L Elliott, The Guardian 12-1-15
http://www.theguardian.com/business/2015/jan/12/oil-slump-uk-petrol-prices-fall)

(a) What is the expected percentage change in the quantity of petrol demanded if the price elasticity of demand is –0.2?

(1)

☒ **A** –0.4%

☒ **B** +0.4%

☒ **C** –4%

☒ **D** +4%

(b) The price elasticity of demand for petrol is –0.2. Explain the change to the total revenue of petrol stations as a result of cutting their prices.

(3)

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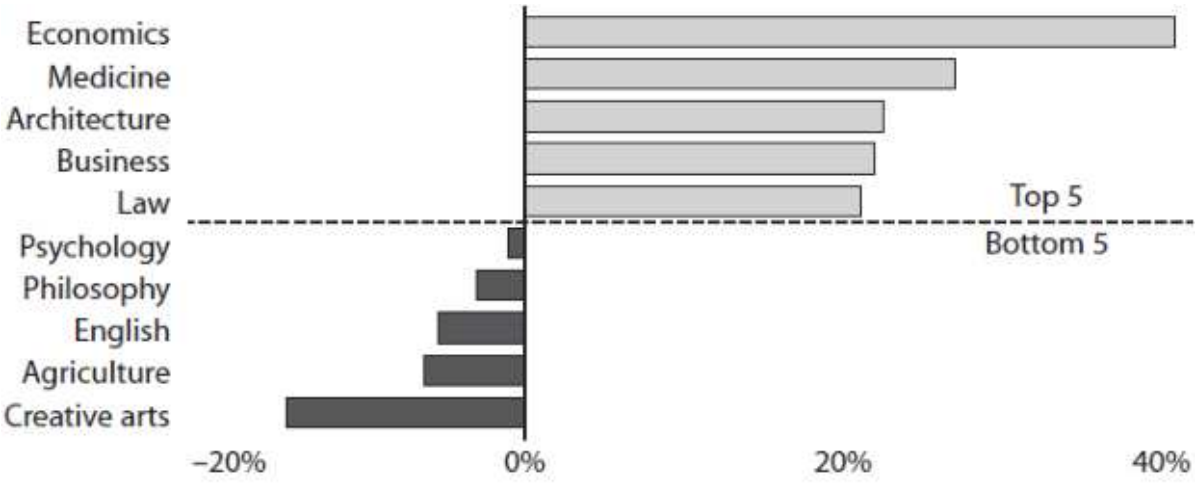
(Total for question = 4 marks)

Q6.

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

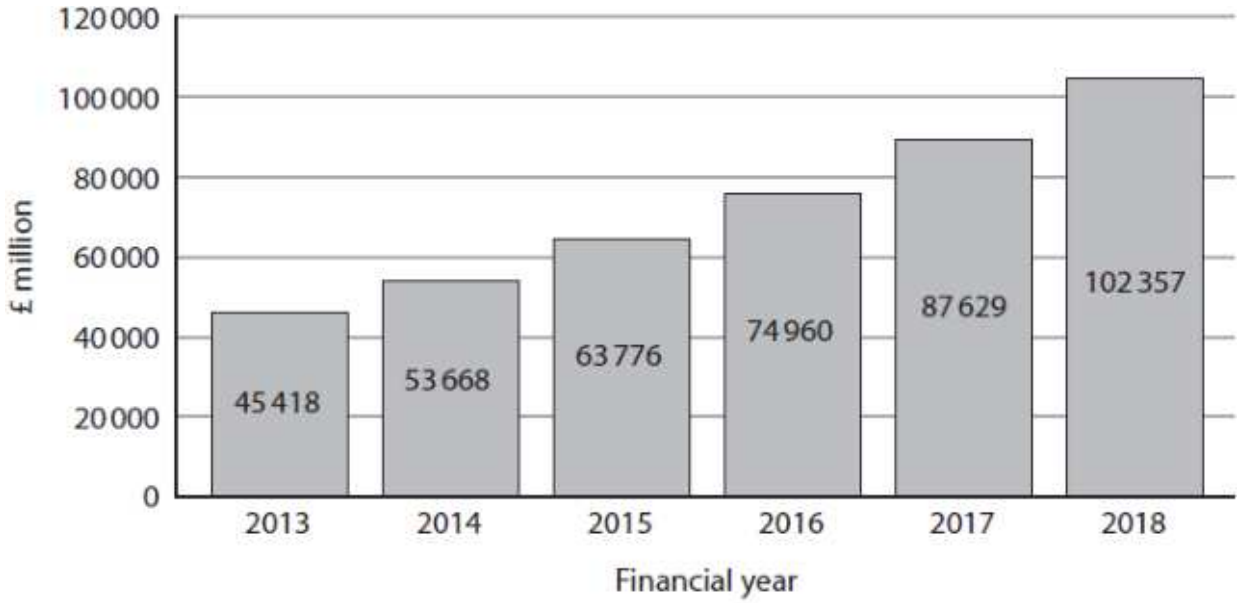
The market for higher education in the UK

Figure 1: Average graduate earnings, according to subject studied, compared to average non-graduate earnings (per cent) 2018 selected subjects.



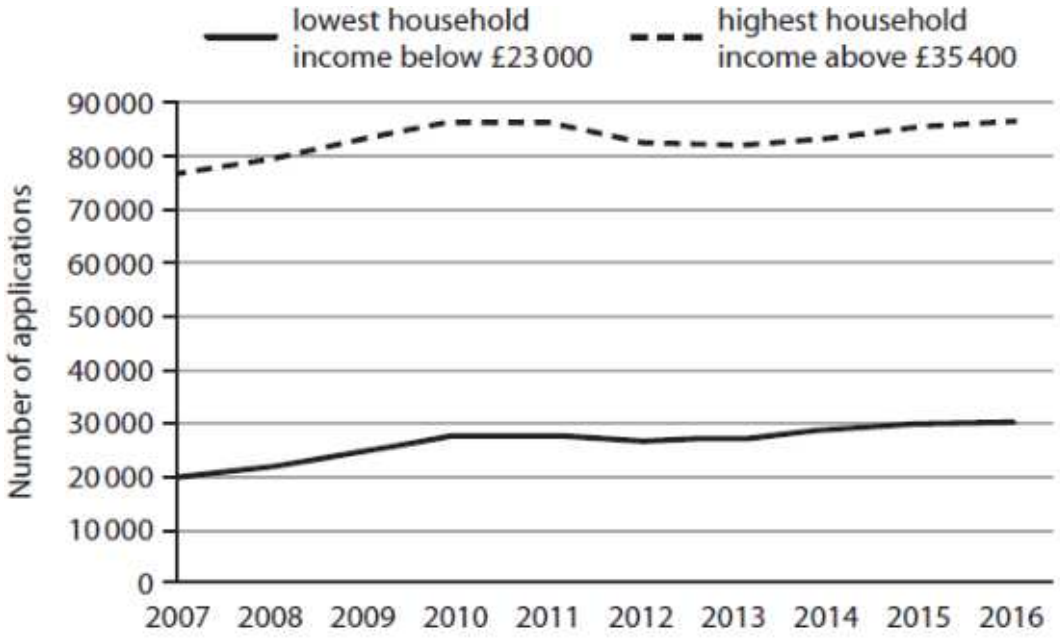
(Source: adapted from https://www.ifs.org.uk/publications/13731
The impact of undergraduate degrees on early-career earnings, Research report, November 2018)

Figure 2: Student loans outstanding at the end of financial years 2013 to 2018 in England



(Source: adapted from https://www.slc.co.uk/official-statistics/student-loans-debt-and-repayment/england.aspx)

Figure 3: Number of applications to UCAS according to median income of area



(Source: adapted from https://www.ucas.com/corporate/data-and-analysis/ucas-undergraduate-releases/2018-cycle-applicant-figures-january-deadline)

Extract A

Rethinking tuition fees

The value of a degree is significant. The latest data shows that the median university graduate income was £10 000 more than the average non-graduate income in 2018. This 'graduate premium' means graduates will contribute significantly to the economy. In addition, the government will benefit greatly from additional tax revenues.

However, funding higher education continues to be a major issue. English universities charge some of the world's highest fees. Interest rates on student loans are now 6.3%. There are a large number of courses where graduates are likely to earn less than non-graduates, despite an average of £50 000 of debt.

The Department for Education estimates that 45% of the value of loans will not be repaid. Outstanding student loans in England totalled more than £100 billion in 2018. By 2023 total outstanding student loans are forecast to rise to £120 billion.

One option for revising student fees could be to charge higher fees for courses that are more expensive to teach or that have a better chance of higher earnings. That would make Science or Mathematics degrees more expensive to study than English or Philosophy.

At most universities the level of fees is likely to be the same flat rate of £9 250 per year. However, science-based courses need more expensive equipment and courses such as medicine require more teaching time and personal instruction.

Tuition fees were introduced in 1998 at £1 000 per year. They are currently £9 250. Economists estimate that the price elasticity of demand for higher education is about –0.5.

Charging £9 250 a year for an undergraduate degree makes England very expensive by international standards. Scotland has no fees for Scottish students, and fees in Wales and Northern Ireland are significantly lower. Much of Europe has low or no fees and Germany, which used to charge fees, has abolished them, replacing them with a graduate tax.

The only country with comparable fees is the United States. Top private colleges can charge more than the equivalent of £30 000 per year while state colleges can charge local students less than fees in England.

Despite this, student numbers at English universities have continued to increase from 450 000 in 1998 to over 700 000 in 2018. Students from all backgrounds are more likely to go to university than ever before.

However, applicants from low-income areas are much less likely to go to university than applicants from high-income areas. The Universities and Colleges Admissions Service (UCAS) found that in the most deprived 10% of postal areas about 20% of young people went to university in 2018, compared with 50% in the highest income areas. Research by University College London revealed that even when candidates from low-income areas had the same exam results, they were much less likely to apply to university than candidates from high-income areas.

(Source: adapted from https://www.theguardian.com/education/2018/dec/16/change-in-student-loan-accounting-could-add-10bn-to-national-debt)

Extract B

Low-income university students twice as likely to drop out than high-income ones

The number of students from low-income areas who drop out of university before finishing their degree is at its highest in five years, indicating a considerable waste of scarce educational resources. This news comes at the same time as a drive to recruit students from poorer backgrounds, with universities spending a total of £725 million on access initiatives in the past academic year alone.

A number of top universities have started to lower their A level grade offers to students from low-income areas, in an attempt to encourage them to apply. However, there is a danger with 'enticing' disadvantaged students through lower grade offers, if universities are not going to provide ongoing support for them once they begin their courses.

The latest figures show that 9% of disadvantaged undergraduates do not continue in higher education beyond their first year. In comparison, the average drop-out rate among students from the high-income backgrounds was less than 5%. The gap continues to widen.

A report, published by the Office for Fair Access, concluded that: 'The significance of this for students is huge. Higher education can be a transformational experience that opens doors to rewarding careers and social mobility, but this is only the case if students achieve successful outcomes.'

(Source: adapted from https://www.telegraph.co.uk/news/2017/06/28/number-poor-students-dropping-university-highest-level-five/)

(a) Explain why 'the price elasticity of demand for higher education is about –0.5' may be of relevance to English universities.

Refer to Extract A in your answer.

(5)

According to Extract B, the drop-out rate of students from low-income households is much higher than that of high-income households.

(b) Assess the likely impact of these drop-out rates on the allocation of resources within an economy.

(10)

(c) With reference to Extract A, explain **one** likely private benefit to students and **one** likely external benefit of higher education.

(6)

(d) With reference to Figure 2, calculate the percentage increase in outstanding student loans from 2013 to 2018.

You are advised to show your working.

(4)

(e) With reference to Figure 1 and Extract A, discuss the benefits of allowing universities to charge higher tuition fees for some degree courses.

(15)

EITHER

(f) Evaluate the possible advantages of a free market approach to providing services such as education.

(20)

OR

(g) Evaluate whether government intervention is able to correct market failure in education.

(20)

(Total for question = 60 marks)

Q7.

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

In August 2017 Hurricane Harvey caused the closure of nearly a quarter of the oil production capacity in the United States.

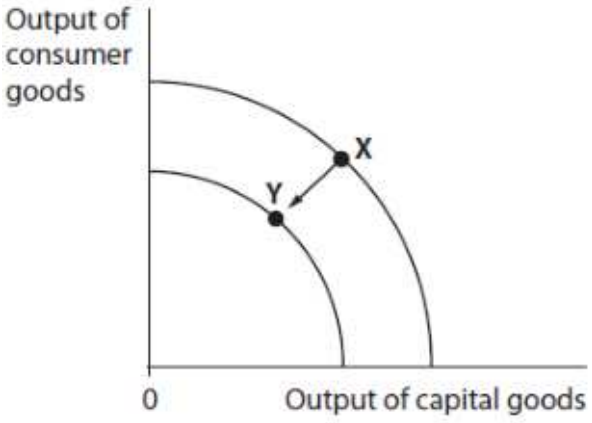
(a) Draw a supply and demand diagram to show the likely microeconomic effects of the hurricane on the US oil market.

(4)

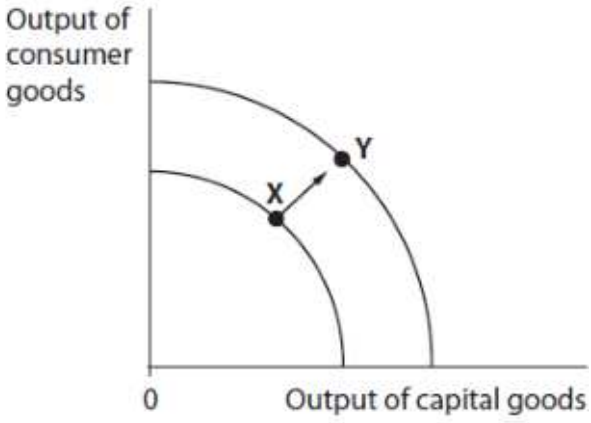
(b) The diagrams show movements from position X to Y on production possibility frontiers. In which **one** of the diagrams does the movement from X to Y illustrate the most likely impact on the US economy of a natural disaster such as Hurricane Harvey?

(1)

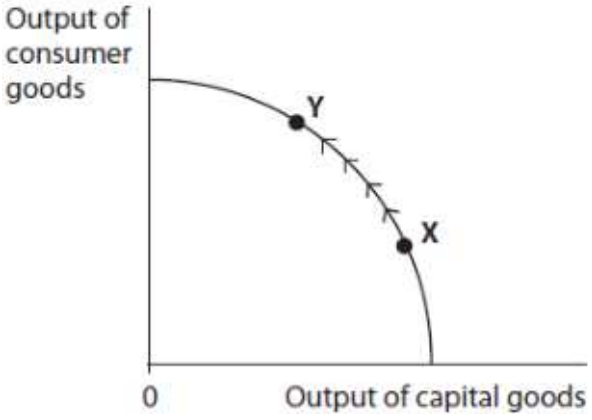
☐ **A**



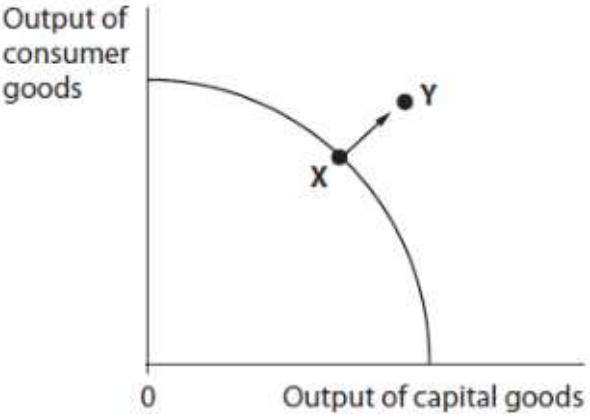
☐ **B**



☐ **C**



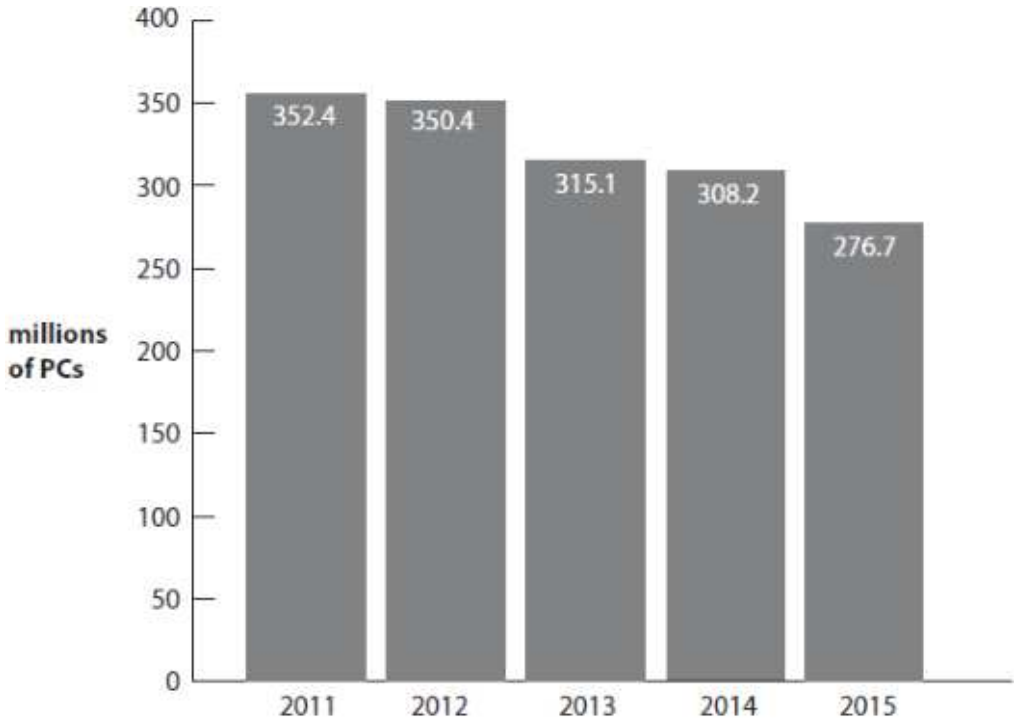
☐ **D**



(Total for question = 5 marks)

Q8.

The following graph shows the global sales of personal computers (PCs) between 2011 and 2015.



(Source: adapted from IDC and reported in *The Times*, 14th January 2016)

(a) The percentage decrease in sales of PCs between 2011 and 2015 is:

(1)

☒ **A** 21.5

☒ **B** 27.3

☒ **C** 31.5

☒ **D** 75.7

(b) Explain **one** likely reason for the decrease in sales of PCs.

(2)

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The following table shows global sales of PCs by company in 2015.

Company	Sales of PCs (million)
Lenovo	57 182
HP	53 534
Dell	39 049
Apple	20 794
Acer Group	19 680
Others	86 461
Total	**276 700**

(Source: IDC, reported in *The Times*, 14th January 2016)

(c) Calculate the five-firm concentration ratio. You are advised to show your working.

(2)

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(Total for question = 5 marks)

Q9.

Read Extracts A and B and Figure 1 before answering the question.

The market for fish

Extract A

Total allowable catches of North Sea cod halved in response to falling stocks

In 2020, new lower limits on the quantity of cod that can be caught by the UK fishing fleet came into force. These limits on the fish catch, called total allowable catches (TACs), were agreed at the annual EU fisheries negotiations.

It was the last December EU meeting attended by the UK before it left the EU. It was agreed that cod catch limits will be cut by 50% in the North Sea, while reduced limits were agreed for cod in the Celtic Sea, Irish Sea and west of Scotland.

However, there were increases for other types of fish, with TACs for haddock in the North Sea rising by 23% and for sole rising by 19%.

UK Fisheries Minister George Eustice said: "This year there has been mounting scientific evidence suggesting that cod is being overfished in many parts of the northeast Atlantic and we have responded to conserve stocks".

These new regulations applied to the UK while it remained part of the Common Fisheries Policy. In the future it will become an independent coastal state and negotiate on fisheries with the EU and other coastal states such as Norway.

(Source adapted from: https://www.independent.co.uk/news/business/news/north-sea-cod-stocks-quota-climate-change-brexit-a9252196.html)

Figure 1

Atlantic over-fishing: share of total allowable catch (TAC) in excess of scientific advice (2019)

Country	Excess TAC (%)	Excess TAC (tonnes)
Sweden	52.4	17 369
United Kingdom	24.3	106 925
Ireland	21.7	34 052
Denmark	19.7	49 914
Germany	18.0	20 620
The Netherlands	13.5	31 910
Belgium	10.4	3 009
France	9.4	27 230
Spain	6.6	16 689
Portugal	3.8	3 662

(Source adapted from: Statista 2018)

Extract B

The tragedy of the commons

The 'tragedy of the commons' may occur when there are common access resources (CARs). These are natural resources over which no private ownership has been established. Therefore, there are difficulties in excluding people from using or exploiting them. CARs include fisheries and common grazing lands. Oceans are so vast that it is impractical for one fishing company to establish ownership and control. This means that others cannot be prevented from exploiting the ocean. Economists have suggested that with the lack of ownership of these resources, private producers will act in their own self-interest and exploit CARs to maximise profit. This exploitation is unsustainable. In other words, CARs provide an opportunity for individuals to create profit, while creating negative externalities which impact on everybody else. This process is referred to as the 'tragedy of the commons'.

The 'tragedy of the commons' is at the core of a range of problems that are relevant and threatening to natural resources, environments and human health. In the case of overfishing, fishing companies are not made accountable for the state of the ocean. They continue to fish as much as possible to maximise profit. Today, 90% of fish stocks are depleted.

The reason for such a wide range of problems is because there is an environmental cost for everything. The 'tragedy of the commons' is the outcome of the fact that every resource is limited on this planet, coupled with the rising level of demand for these resources. These issues are large-scale and require laws, regulation and international cooperation.

(Source adapted from: http://felixonline.co.uk/articles/2019-12-09-tragedy-commons-drama-planet-not-enjoying/)

(a) Explain the likely impact of the new 2020 TACs on the price of cod. Include a supply and demand diagram in your answer.

(5)

According to Extract B, lines 15–16, 'fishing companies are not made accountable for the state of the ocean. They continue to fish as much as possible to maximise profit'.

(b) Assess whether it is rational for fishing companies to behave in this way.

(10)

(c) With reference to the information provided and your own knowledge, explain **two** characteristics of private ownership in a free market economy.

(6)

Fish and chips are complementary goods with an estimated cross elasticity of demand of –8. Currently 950 000 bags of chips are sold in UK fish and chip shops each day.

(d) With reference to the information provided, calculate the new quantity demanded of bags of chips from fish and chip shops, following a 2% increase in the price of fish. You are advised to show your working.

(4)

The UK fishing industry employs about 24 000 people, more than half of them working in Scotland.

(e) Discuss the likely impacts on an economy of specialising in the fishing industry. Use a

production possibility frontier diagram in your answer.

(15)

EITHER

(f) Some economists suggest that the market price of cod does not result in the socially optimum level of output. Evaluate the likely external costs from the over-fishing of cod. Use an appropriate diagram in your answer.

(20)

OR

(g) Other than using a TAC, evaluate the policy options which could be used to reduce market failure resulting from over-fishing. Use at least one appropriate diagram in your answer.

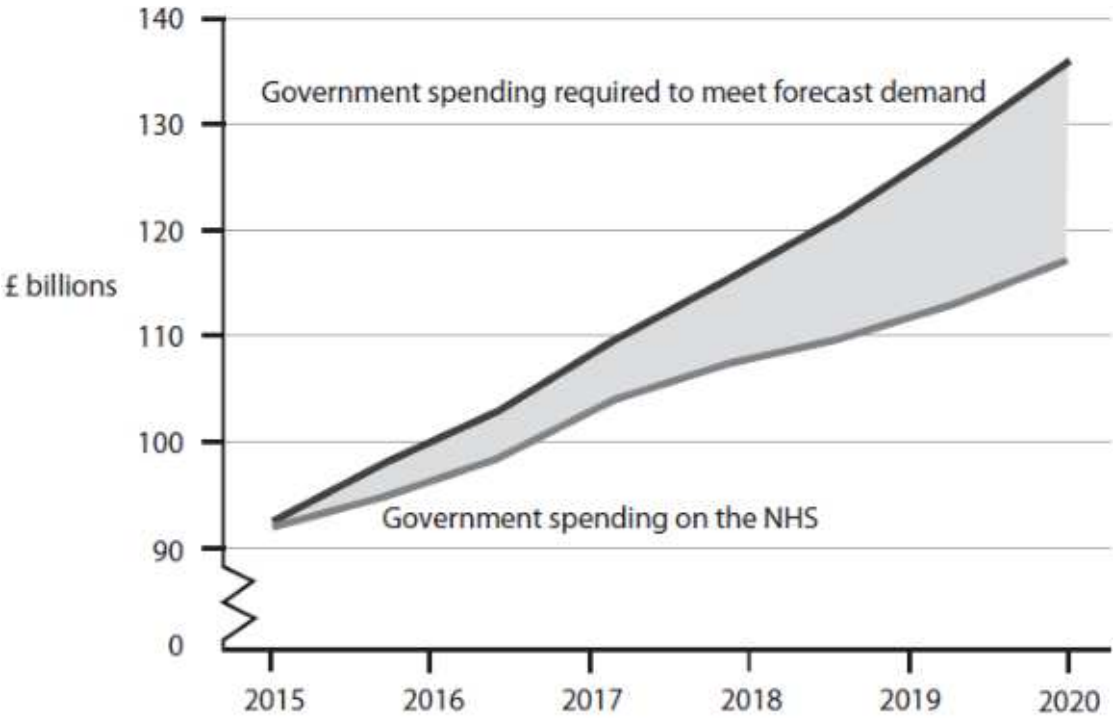
(20)

(Total for question = 60 marks)

Q10.

Health provision

Figure 1: National Health Service (NHS) in England: Government spending and projected funding gap, £ billions, 2015 to 2020



(Source: https://www.economist.com/news/britain/21706563-nhs-mess-reformers-believe-new-models-health-care-many-pioneered)

Figure 2: Percentage of NHS patients in England waiting over 18 weeks for non-emergency treatment



(Source: https://www.statista.com/chart/8813/more-and-more-people-made-to-wait-by-the-nhs/)

Extract A

Hospitals already full

National Health Service (NHS) managers' warned that bed occupancy rates are approaching 99% in some parts of the country, compared with recommended levels of 85%. In 2017 the number of patients waiting for non-urgent treatment passed the four million mark, the highest figure for almost a decade.

The chief executive of the NHS suggested that waiting list targets for routine operations such as hip and knee replacements would have to be sacrificed in order to protect other services, including accident and emergency (A&E) and cancer care.

However, the government has insisted waiting time targets must still be met. Recently the Chancellor awarded the NHS £2.8 billion over three years, including £1.6 billion in 2018 - less than the £4 billion which NHS officials had asked for to keep up with an ageing population and new medical technologies.

NHS managers said there was now very little spare capacity in the system, warning of shortages of paramedics, doctors, A&E consultants and nurses.

(Source: adapted from http://www.telegraph.co.uk/news/2017/12/07/hospitals-already-full-bursting-pressures-mount-warn-nhs-chiefs/)

Extract B

How health care is funded

Most countries have a mixed economy of health provision typically funded from taxation, patient fees and private health insurance.

The NHS was launched in the UK in 1948 to ensure direct state provision by the government of health care 'free at the point of use'. The NHS is mainly funded from general taxation. However, some NHS patients pay for some of their medical care, such as prescriptions to buy medicine.

In the ongoing debate about how best to fund the NHS, some people have proposed introducing a £12 charge for visiting a General Practitioner (GP) doctor. Proponents argue that such a charge would deter overuse of GP services by those who do not have genuine health needs. It would also raise additional money for the NHS and create incentives which will stimulate innovation and more choice.

Estimates suggested that a £12 charge on the 450 million visits a year to GPs could have raised enough to cover hospitals' overspend in 2016. Based on exemptions for prescriptions, 90% of patients will not be charged including the elderly, children and low income groups. There would also be administrative costs of collecting the charge and verifying exemptions. These arrangements would significantly reduce the amount a charge would generate, assuming no one paying would be dissuaded from visiting their GP.

The proportion of people in the UK taking out private health insurance (PHI) to pay for private health care has increased to 10.6%, despite significant increases in the prices of treatment in private hospitals. Some economists argue that the government should provide subsidies to encourage people to take out private health insurance. This would reduce the burden on the NHS by taking some people out of the state system. Furthermore it is argued that private health care increases choice for users, encourages competition and drives up standards of care.

A typical PHI policy for a healthy 35-year-old costs about £650 a year but this rises steeply to £2 300 for those aged 70, when claims are far more likely. The level of contribution is based on their risk of requiring health care. PHI also tends to incur high management and administrative costs due to the resources required to assess risk and claims. Also there is the possibility of market failure given asymmetric information.

(Source: adapted from https://www.kingsfund.org.uk/publications/how-health-care-is-funded)

Extract C

Public parks are a public good

Public parks are places which people can use for free to exercise or to relax. Parkrun Limited organises free weekly runs in local parks attracting hundreds of joggers per park to enjoy healthy exercise. The government is proposing to ban local authorities charging Parkrun for the use of public parks to fund the maintenance of public parks. The government considers that it is appropriate for the public to pay a reasonable sum for the private use of a facility such as a tennis court or a football pitch which may be used exclusively. However, the government does not consider it appropriate for a local authority to charge a volunteer community group 'seeking to provide a free weekly event' for the use of a public park. Parkrun share the park with other park users. Although a running course may be marked out there is no restriction on other people using the park.

(Source: adapted from © Crown Copyright Running Free – Government consultation on preserving the free use of public parks, April 2017, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/608372/Parkrun_ConDoc.pdf and http://www.telegraph.co.uk/news/2017/04/14/councils-banned-charging-runners-take-part-regular-saturday/)

(a) With reference to Extract A and Figure 2, explain how the health care market in the UK illustrates the economic problem.

(5)

(b) Explain how 'asymmetric information' (Extract B, line 30) can lead to market failure in health provision.

(6)

(c) 'Public parks are a public good' (Extract C, line 1). Assess this statement.

(10)

(d) Calculate the annual revenue raised by charging £12 per GP visit. Assume there will be 450 million GP visits per year and 90% of these will not be charged. You are advised to show your working.

(4)

(e) Discuss likely reasons why the prices of treatments in private sector hospitals are increasing. Draw a supply and demand diagram to support your answer.

(15)

EITHER

(f) Evaluate possible ways the government could intervene to reduce the excess demand for state-funded health care.

(20)

OR

(g) Evaluate the possible disadvantages of a free market approach to providing health care.

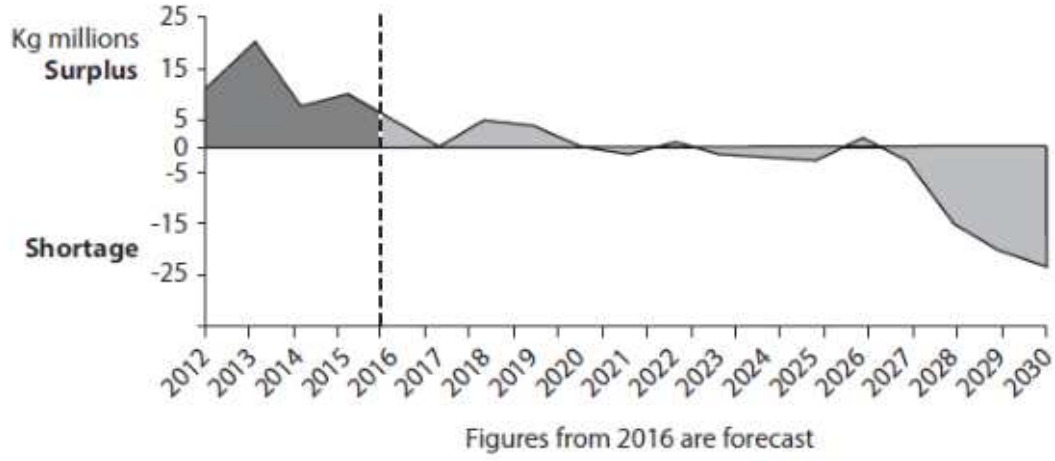
(20)

(Total for question = 60 marks)

Q11.

Energy markets

Figure 1: Annual surplus or shortage of uranium, measured in millions of kilograms



(Source: adapted from http://www.telegraph.co.uk/business/2016/11/20/uranium-the-unloved-metal-whose-price-is-poised-to-go-radioactiv/)

Extract A

Uranium: the unloved metal

Uranium is a fuel source for nuclear energy production. The price of uranium has fallen to a 13-year low. Uranium is a relatively common metal but locating it in the right concentrations can be difficult. Australia has the biggest known resource of uranium, followed by Kazakhstan. Kazakhstan's production has increased significantly since 2007, accounting for a large proportion of the surplus of this metal. Given the large stockpiles of uranium some firms have ceased production.

The biggest impact on the uranium market has been the devastating accident at the nuclear power station in Fukushima, Japan, in 2011. The accident caused a leak of radiation. The accident reduced confidence in the entire nuclear industry, as high doses of radiation leaks increase the risk of cancer. In addition the high cost of safely storing radioactive waste has delayed the building of new nuclear power stations. Japan initially closed all of its 50 nuclear power stations which reduced the demand for uranium. But it has since concluded that nuclear power must be part of its mix of energy suppliers.

Despite this setback in 2016 work started on a new uranium mine in Spain to meet the expected rise in demand for the metal. Uranium is a controlled material, so mining companies have to comply with many regulations before opening a new mine. When it opens in 2018, this will be the only uranium mine in Europe, producing 2.2 million kilos a year. It has been in development for more than a decade.

Most developed countries, with the notable exception of Germany, have concluded that nuclear power is an essential part of their energy supply. The US and UK are committed to building new nuclear power stations, the latter providing a £30 billion subsidy to build a new nuclear plant at Hinkley Point. China is also building a further 60 nuclear power stations.

Supporters of nuclear power say it provides a reliable source of energy at a time when the world's population is increasing, unlike solar power and wind power which both vary with the weather. In addition they argue that no country can significantly reduce carbon emissions, which are causing climate change, without nuclear. France and the UK have committed themselves to shut down all coal-fired power stations by 2025. So demand for uranium over the next two decades seems guaranteed.

(Source: adapted from Uranium: the unloved metal whose price is poised to go radioactive, Jon Yeomans, The Telegraph, 20 November 2016 http://www.telegraph.co.uk/business/2016/11/20/uranium-the-unloved-metal-whose-price-is-poised-to-go-radioactiv/)

Extract B

Irrational consumers pay the price

The UK Government has announced that it might introduce maximum price controls on energy used by households.

The UK's largest energy suppliers are braced for what could be the industry's most significant government intervention following a decade of rising energy bills and low numbers of consumers switching between energy providers.

The Prime Minister promised to intervene because the energy market is "manifestly not working" for consumers. Energy prices have risen by 158% in the last 15 years, and four million households, especially those on low incomes, are still on the most expensive energy rates.

Some energy analysts have warned the Government against taking a highly interventionist approach that could undermine the energy market and leave customers paying higher prices in the future.

(Source: adapted from http://www.telegraph.co.uk/business/2017/03/22/governments-pledge-cut-energy-prices-risks-leaving-consumers/)

Extract C

The economics of climate change

Rising carbon dioxide emissions result from the increase in the use of coal, gas and oil in transport and for energy production. In addition, deforestation, food production and processing methods make the problem worse. These carbon emissions are causing a rise in global average temperatures, known as climate change. Climate change could cause hundreds of millions of people to suffer hunger, water shortages and coastal flooding.

Three elements of policy are required for an effective global response to reduce carbon emissions. The first is the pricing of carbon, implemented through tax, trading pollution permits or regulation. The second policy is to support innovation and the deployment of low-carbon technologies. And the third is action to remove barriers to energy efficiency, and to inform, educate and persuade individuals about what they can do to respond to climate change.

(Source: adapted from www.sternreview.org.uk/)

(a) With reference to Figure 1 and Extract A, explain why the price of uranium has 'fallen to a 13-year low' (Extract A, lines 2 and 3) in 2016. Include a supply and demand diagram in your answer.

(5)

(b) With reference to Extract A and your own knowledge, assess whether the supply of uranium is likely to be price elastic or price inelastic.

(10)

(c) With reference to Extract B, explain **two** likely reasons why many consumers of energy have not switched to suppliers offering lower prices.

(6)

(d) Using examples from the information provided, explain what is meant by renewable and non-renewable energy.

(4)

The UK Government is considering introducing a maximum price for energy.

(e) Discuss the likely microeconomic effects of this decision on energy producers **and** consumers. Include a supply and demand diagram in your answer.

(15)

EITHER

(f) Using the concept of external costs, evaluate whether nuclear power is under-provided or over-provided in the energy market. Use an appropriate diagram in your answer.

(20)

OR

(g) Evaluate ways in which government intervention could be used to reduce carbon emissions. Use at least one appropriate diagram in your answer.

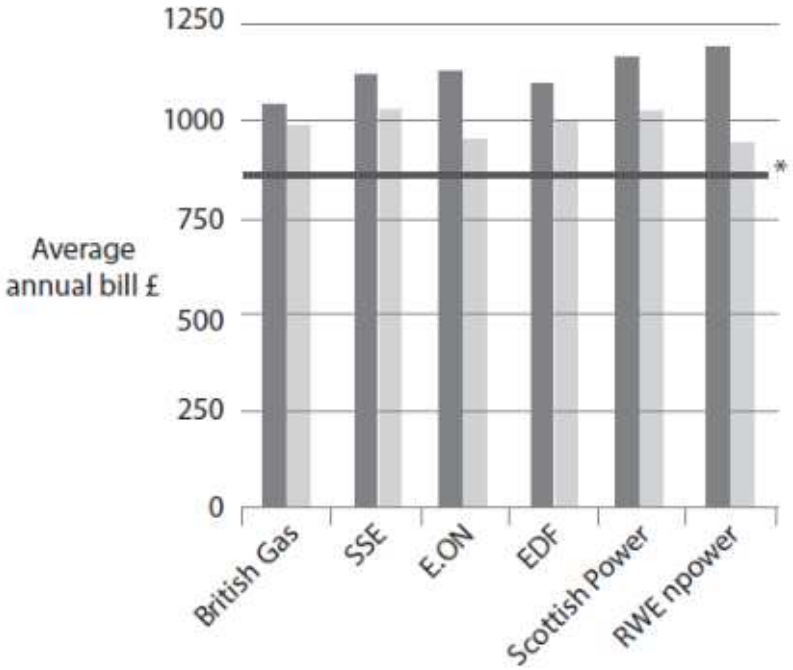
(20)

(Total for question = 60 marks)

Q12.

Energy and telecommunication markets in the UK

Figure 1: Average annual household bill from the Big Six UK energy suppliers, 2017



(Source: https://www.lovemoney.com/news/67298/standard-variable-tariff-compared-cheapest-deal-provider-savings)

Extract A

Energy price cap to fix 'broken' market in UK

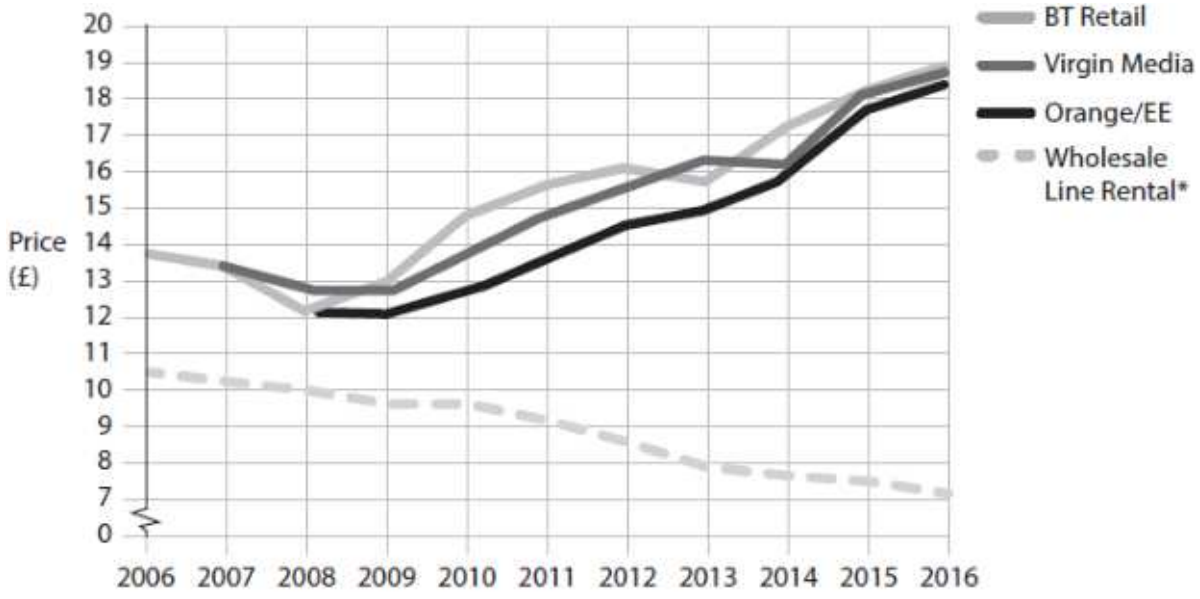
The Prime Minister recently said that the regulator Ofgem (Office of Gas and Electricity Markets) should limit electricity and gas suppliers' most expensive tariffs.

Under the planned new legislation, the energy bills of 11 million households will be capped for as long as five years. The government claimed this cap could save households up to £100 a year. This legislation would force Ofgem to change the licence conditions for energy suppliers so that they are required to cap electricity and gas prices. The measure will apply to anyone on a standard variable tariff, the expensive plans that customers are moved to when cheaper, fixed-price deals end. Ofgem will need to consult energy companies on how the cap is calculated, the government said. The Prime Minister repeated her claim that she had to act because the 'market is broken', a charge the big energy companies reject. "I have been clear that our broken energy market has to change – it has to offer fairer prices for millions of loyal customers who have been paying hundreds of pounds too much," she said.

However, Michael Lewis, chief executive of E.ON said "the government must guard against any unintended consequences that undermine customer service and push up prices as a whole. A price cap will not be good for customers. It will reduce competition and innovation". Smaller suppliers such as First Utility said the Big Six had only themselves to blame for the cap, because they had kept millions of people on standard variable tariffs.

(Source: adapted from 'UK puts energy efficiency at heart of climate change strategy', Adam Vaughan, Copyright Guardian News & Media Ltd 2017 https://www.theguardian.com/money/2017/oct/12/may-energy-price-cap-ofgem-electricity-gas-tariffs)

Figure 2: The monthly rental cost of a telephone landline



*Wholesale line rental – the rental price BT Openreach charges telephone service providers

(Source: https://www.ofcom.org.uk/about-ofcom/latest/features-and-news/landline-prices-review)

Extract B

BT profit rises

BT Group, which includes BT Openreach and BT Retail, reported a rise in profit as revenue increased following the integration of the consumer mobile business, EE. BT finalised the takeover of EE in August 2016, and the integration has resulted in BT controlling 35% of the mobile consumer market. The profit of the UK-based telecommunication group in its second quarter 2017 rose to £566 million.

BT Group chief executive Gavin Patterson said: "We will operate a multi-brand strategy with UK customers being able to choose a mix of BT, EE or Plusnet services, depending on which suits them best. The acquisition enables us to offer great value bundles of services and customers are set to be the winners as we compete for their business".

(Source: adapted from www.marketwatch.com (Oct 27 – 2016) and http://home.bt.com/news/bt-life/bt-to-retain-ee-brand-as-acquisition-confirmed-11364037422234)

Extract C

BT to slash landline charges for 1 million customers

Rental charges for landline-only customers – households with a telephone-only contract but no BT broadband – will fall from £18.99 to £11.99 per month after the regulator attacked existing deals as 'poor value for money'. This rental reduction will save a million landline-only customers £84 a year.

The regulator Ofcom (Office of Communications) said it stepped in because these bills for landline-only customers – nearly two-thirds of whom are over 65 – have "soared" in recent years. This is despite BT and other landline providers benefiting from significant cuts in the wholesale line rental cost of providing the service by BT Openreach. Many landline-only customers are elderly, and have been with BT for decades. Ofcom has focused on BT because it accounts for two-thirds of the UK's 1.5m landline-only customers.

A spokesperson for Ofcom said "This position [of dominance] has allowed BT to increase prices without much risk of losing customers, and other providers have followed BT's pricing lead. We expect BT's price cut to mean other providers will follow suit". Ofcom said that over three-quarters of BT's landline-only customers have never switched provider, which has left them a prime target for price rises. The regulator said that all major landline providers have increased their line rental charges by between 23% and 47% in recent years, while their own costs for providing the service have fallen about 27%. Ofcom said it is also looking at measures to help people shop around for better deals with more confidence.

(Source: adapted from 'BT to slash landline charges for 1m customers', Mark Sweney, Copyright Guardian News & Media Ltd 2017 https://www.theguardian.com/business/2017/oct/26/bt-to-slash-landline-charges-for-1m-customers)

(a) With reference to Extract A, explain the difference between a positive statement and a normative statement.

(5)

(b) With reference to Extract B, examine the likely benefits to consumers of the integration between BT and EE.

(8)

(c) With reference to Extract C, assess possible reasons why many 'landline-only' customers do not switch to a cheaper telephone provider.

(10)

(d) Discuss **one** likely reason for the rise in BT's profit (Figure 2, Extracts B and C). Use a cost and revenue diagram to support your answer.

(12)

(e) Discuss methods of government intervention to protect consumers within the utilities markets, such as energy and telecommunications.

(15)

(Total for question = 50 marks)

Q13.

Read extracts A and B before answering this question.

Hand car wash (HCW) firms in the UK

Extract A

What is the true human cost of your £5 hand car wash (HCW)?

The UK's hand car washes (HCWs) are extremely price competitive, but they have also been linked to modern slavery. Are they ever fair for workers?

There is little agreement about how many HCWs there are in the UK. Estimates range from 10 000 to 20 000. This lack of accurate information about the industry makes government regulation very difficult. Automated car washes, with their fierce rotating bristles, used to be the first option for drivers in a hurry. Now there is more choice. While the economy slows and incomes fail to keep up with inflation, demand for HCWs has grown. Many people see paying £5 for a car washed by someone else, rather than cleaning it at home, as a small expense which yields a high utility. But what is the true cost of a £5 car wash – and what should we be paying?

The growth of HCWs is partly the result of changes in the structure of industry in the UK. Many petrol stations have closed as drivers fill up at supermarkets. Garages and their forecourts have closed as cars become more reliable and locked into service agreements. The available sites for HCWs have therefore increased significantly and rents have fallen.

HCW entrepreneurs have identified available land and have benefitted from changes in the labour market, partly as a result of EU migration. UK drivers are now able to obtain cheap and effective hand car washing. For many migrants, car washes are a first job. "They accept car washing for a short period while they improve their language skills and move into other industries," says Ian Clark, a professor of work and employment at Nottingham Business School. "But there are also car-wash workers without networks who are in a dead end, working there for long periods."

Many drivers are only interested in getting the cheapest wash. If the price is very low, it probably means that workers are receiving less than the minimum wage and working in poor conditions. Crude calculations illustrate the problem. A £5 HCW employing five workers for 10 hours a day would need to wash 79 cars a day to just cover the wage costs. This assumes the workers are paid the minimum wage. This is one car every seven and a half minutes. Even if the profit can be higher on valet services, the price of which can be as little as £12 for a full inside-and-out clean, it's hard to see how a car wash price as low as £5 pays a living wage. This ignores all other costs which HCWs incur such as business rates and rent.

Evidence from car-wash workers is limited but Clark and others have been able to build a picture of some of the tougher conditions on drenched forecourts. "Like nail bars and small garment manufacturers, car washes are what we call 'hard-to-reach places,'" Clark explains. As part of the research, Clark and his team spoke to workers from 45 HCWs in the Midlands.

Clark and his team met and observed workers who lacked waterproof boots or trousers, or hi-vis jackets and gloves. "They're spraying around hydrochloric acid solution for alloy wheels, breathing in the vapour and fumes," Clark says. Some workers were paid a little over half the minimum wage.

(Source adapted from: https://www.theguardian.com/world/2018/jul/16/true-human-cost-5-pound-hand-car-wash-modern-slavery)

Extract B

Government intervention in the HCW industry

There are three main areas of government intervention that might impact on labour intensive firms such as HCWs:

First, there is the planning issue which focuses on the impact on the environment, for example, the disposal and recycling of waste water and chemicals. There could be planning regulations to prevent the use of tarmac rather than concrete on forecourts. Tarmac allows waste water and chemicals to seep into the sub soil. It could also be a requirement to have a sludge trap to stop the waste entering waterways.

Second, there is the health and safety issue for workers. Prolonged exposure to chemicals and lack of protective clothing puts the health of workers at risk. Performance targets could involve minimum levels of protective clothing and rest breaks for the workers.

Third, there is the issue of tax. The informal nature of the business type makes tax evasion easier.

Not all UK HCWs violate regulations. There are legitimate, regulated HCW firms as well as examples of good practice by independent outlets. One national supermarket, Tesco, has banned all independent hand car washes from its car parks. It is now in a partnership agreement with national car wash operator Waves. It uses a WashMark certificate of quality and compliance which was introduced by the industry to improve working conditions. Other major supermarkets are considering similar changes. One adviser believes £9 is a reasonable minimum price for a basic wash. Some pressure groups have developed a mobile phone app where evidence of unreasonable conditions can be reported by drivers.

Involving drivers in the issue, and making them demand fairer car washes, creates an incentive for good businesses to improve practices and come forward to get a WashMark certificate.

(Source adapted from: https://www.parliament.uk/documents/commons-committees/environmental-audit/Hand-Car-Wash-evidence.pdf research into HCWs by Professor Ian Clark, Nottingham Business School May 2018)

(a) Using the information provided, explain the market structure that best describes the hand car wash (HCW) industry in the UK.

(5)

(b) Examine **two** reasons why the demand for HCWs increases during a period when consumer 'incomes fail to keep up with inflation' (Extract A line 8).

(8)

(c) Discuss the likely effects of changes in the level of migration on firms such as HCWs in the UK. Use a labour market diagram and the information provided to support your answer.

(12)

EITHER

(d) Evaluate the microeconomic and macroeconomic factors which determine the number of firms in an industry. Refer to HCWs or another industry of your choice.

(25)

OR

(e) Evaluate the microeconomic and macroeconomic effects of increased government intervention in an industry. Refer to HCWs or another industry of your choice.

(25)

(Total for question = 50 marks)

Q14.

The average fee charged by high-street estate agents to homeowners for selling property is 1.3% of the final sale price.

(Source: http://www.which.co.uk/money/mortgages-and-property/homemovers/ guides/selling-a-house/estate-agent-fees-and-contracts)

(a) Assume the selling fee is 1.3%. Calculate the payment received by an estate agent on a property sold for £489 000. You are advised to show your working.

(2)

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In August 2016 the Office for National Statistics reported that the average house price in London was £489 000, whereas in the North East of England it was £127 000.

(b) The ratio of the average house price in London to the average house price in the North East of England is:

(1)

☒ **A** 0.26

☒ **B** 3.62

☒ **C** 3.85

☒ **D** 7.40

(c) Explain **one** likely reason for the difference in average house prices between London and the North East of England.

(2)

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(Total for question = 5 marks)

Q15.

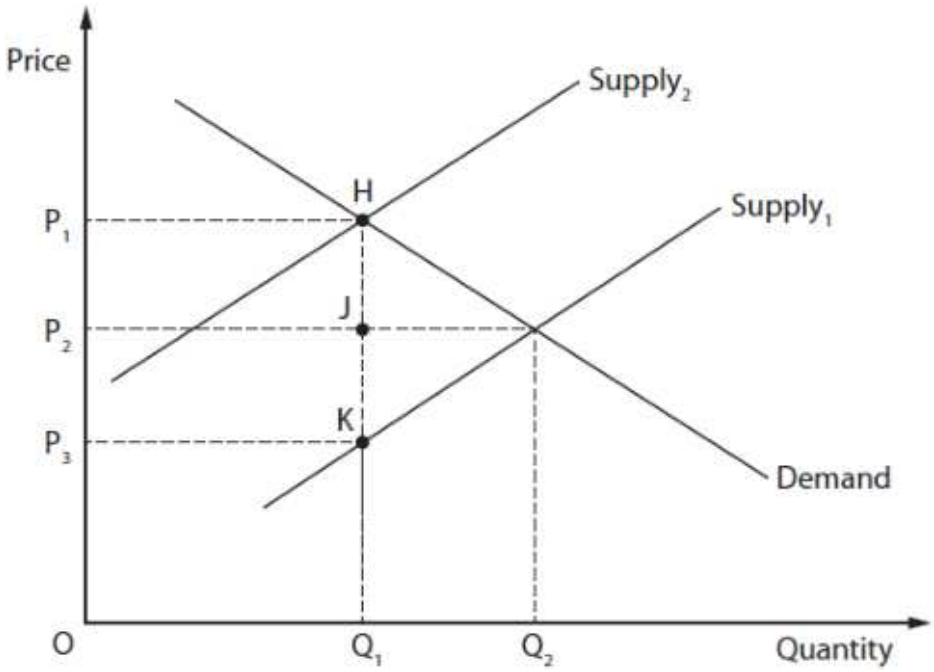
Use the data to support your answers where relevant. You may annotate and include diagrams in your answers.

Answer the question with a cross in the box you think is correct ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

The UK Government uses a range of indirect taxes to affect the market prices and quantities of many goods and services.

(a) In the diagram below, the government imposes a specific tax on a product.

This shifts the supply curve from $Supply_1$ to $Supply_2$.



The government's tax revenue is shown by the area:

(1)

☒ **A** OP_1HQ_1

☒ **B** P_2P_1HJ

☒ **C** P_3P_1HK

☒ **D** P_3P_2JK

(b) Using an example, explain why the government imposes **specific** taxes on many goods and services.

(3)

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(Total for question = 4 marks)

Mark Scheme

Q1.

Question Number	Answer	Mark
(a)	**Application 1** **The only correct answer is C** ***A*** *is not correct because they may multiplied 8.75 by -0.1* ***B*** *is not correct because they have mistakenly taken 2017 as the original year in the percentage change calculation* ***D*** *is not correct because the percentage change in quantity demanded has not been multiplied by -0.1.*	**(1)**

Question Number	Answer	Mark
(b)	**Knowledge 1, Application 1, Analysis 1** **Knowledge/Understanding** 1 mark for recognition of the effect of a change in income on the demand **Application** 1 mark for application to Freddo, e.g. • YED is negative (1) • Freddos is an inferior good (1) • YED is inelastic **Analysis** 1 mark for linked development, e.g. • Sales revenues fall as incomes rise or • Sales revenue rise when incomes fall • Company should plan to produce less when the economy does well or • Company should plan to produce more when economy/incomes are not growing	**(3)**

Q2.

Question Number	Answer	Mark
(a)	**Application 1** **The only correct answer is D** ***A*** *is not correct because a negative figure would indicate they are complements* ***B*** *is not correct because a figure less than one indicates a distant relationship* ***C*** *is not correct because whilst positive is a substitute a figure less than one does not indicate a close relationship.*	**(1)**

Question Number	Answer	Mark
(b)	**Knowledge 1, Application 2** **Knowledge/Understanding** 1 mark for identifying revenue as price x quantity (this understanding may be implicit) **Application** 1 mark for calculating percentage change in quantity (-)1.5% or actual change 18.8135 million tickets (allow 18.8 million) 1 mark for correct answer £143.547 million (allow 143.5 to 143.6) **NB Award 3 marks for correct answer £143.547 million (allow 143.5 to 143.6)** **NB Maximum of 2 marks if correct answer is not given**	**(3)**

Q3.

Question Number	Answer	Mark
(a)	**The only correct answer is B** ***A*** *is not correct because as a quantitative skill this describes the range rather than median so acts as a distractor* ***C*** *is not correct because as a quantitative skill this describes the mode rather than median so acts as a distractor* ***D*** *is not correct because as a quantitative skill this describes the mean rather than median so acts as a distractor*	**(1)**

Question Number	Answer	Mark
(b)	**Knowledge 1, Application 1, Analysis 1** **Knowledge/understanding** 1 mark for correct definition of inferior good e.g. as incomes rise demand falls or YED formula = %△Qd/%△Y Or as incomes falls more demand for inferior goods **Application** 1 mark for, e.g. 1 mark for calculating percentage change in income = 1.5/24.2 =+6.2% 1 mark for calculating YED = -3%/+6.2% = -0.48 (accept range -0.48 to -0.5) **Analysis** 1 mark for linked development e.g. bus travel is an inferior good as YED is negative (1). Or explanation of the inverse relationship (1).	**(3)**

Q4.

Question Number	Indicative content	Mark
	Knowledge 4, Application 4, Analysis 8, Evaluation 9 • Definition of microeconomic consequences • Identification of positive XED Positive consequences • Consequences for microeconomic agents of increased demand for electricity – consumers, electric vehicle manufacturers, electric vehicle dealers, battery manufacturers, freight companies, retailers, government, employees. • Use of cost and revenue diagram for to show the effect on profit of falling cost of electric powered vehicles/rising revenue. • Welfare effects on consumer and producer surplus of consumers switching to electric powered vehicles. • Efficiency – allocative, productive, dynamic • Positive external benefits • Reduced negative external costs (MSC>MPC) closer to social optimum Negative consequences • Use of cost and revenue diagram to show the effect on profit of rising cost of petrol or diesel/declining revenue (D=AR). • Welfare effects on consumer and producer surplus of consumers switching away from diesel or petrol. • Efficiency – x-inefficiency • Loss of government revenue as a large proportion of petrol or diesel price is tax • Negative external costs associated with e car manufacturing **NB: Negative consequences can be seen as KAA and positive consequences against as evaluation or vice versa.**	

	Evaluation • Predictions may be wrong – dynamic market forces between substitutes may result in cheaper sources of oil, electric power becoming more expensive. Lack of electric infrastructure. Distant substitutes, XED<+1. • Counterarguments made to the point raised e.g. Supernormal profits made may raise barriers to entry, firms may pursue sales maximisation rather than profit maximisation, congestion. • Information gaps • Different geographic markets – regulations and taxes on oil powered vehicles • Impact on the oil market will depend on how electricity is generated • Negative external costs partly offset by increased demand for electricity **NB: Negative consequences can be seen as KAA and positive consequences against as evaluation or vice versa.**	**(25)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	**1–4**	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	**5–8**	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response or superficial, two stage chains of reasoning only.
Level 3	**9–12**	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to apply economic concepts and relate them directly to the broad elements of the question with evidence integrated into the answer. Analysis is clear and coherent, although it may lack balance. Chains of reasoning are developed but the answer may lack balance.
Level 4	**13–16**	Demonstrates precise knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using appropriate examples. Analysis is relevant and focused with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	**1–3**	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	**4–6**	Evidence of evaluation of alternative approaches which is unbalanced leading to unsubstantiated judgements. Evaluative comments with supporting evidence/reference to context and a partially-developed chain of reasoning.
Level 3	**7–9**	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation recognises different viewpoints and is critical of the evidence provided and/or the assumptions underlying the analysis enabling informed judgements to be made.

Q5.

Question Number	Answer	Mark
	D	**(1)**

Question Number	Answer	Mark
	Knowledge 1, Application 2 **Knowledge** 1 mark for identifying that a price fall would result in a fall in total revenue OR definition of total revenue. **Application** 2 marks for linked application (1+1), e.g. • the percentage rise in quantity demanded is lower than the percentage fall in price (1) as demand is price inelastic OR less than 1/-1(1) • diagram showing inelastic demand (1) showing increased revenue is less than lost revenue (1) or numerical example of revenue changes (1+1).	**(3)**

Q6.

Question Number	Answer	Mark
(a)	**Knowledge 1, Application 2, Analysis 2** **Knowledge** 1 mark for understanding/formula of price elasticity of demand i.e. the responsiveness of quantity demanded to a change in price **Application** 2 marks for using data e.g. • reference to fees e.g. £9 250 (1) or PED e.g. -0.5 (1) • 825% increase in fees (2) **Analysis** PED is inelastic (1) so government and universities know that students are prepared to accept higher fees (1) Students are not price sensitive (1) so the level of fees is perhaps less important than other issues e.g. fairness of fees for different courses (1)	**(5)**

Question Number	Answer	Mark
(b)	**Knowledge 2, Application 2, Analysis 2** • The statement is concerning because people from poorer backgrounds are less likely to apply to university in the first place (Extract A, Figure 3), so when they do go and drop out we are failing to maximise the use of scarce resources • Universities are trying to increase accessibility but failing to keep poorer students. This means that graduates are increasingly likely to be from wealthier families and poorer student are leaving because of concern over high levels of debt • Would this happen if England had low or no tuition fees like Germany? • Candidates may draw a PPF showing the country operating within the frontier because as a nation we are not making the most of our labour force • Opportunity cost. Government and universities spending money/resources that could have been spent elsewhere	**(6)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	**1–2**	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no link between causes and consequences.
Level 2	**3–4**	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response or the answer may lack balance.
Level 3	**5–6**	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are applied appropriately to the broad elements of the question.

Question Number	Answer	Mark
(b) continued	**Evaluation 4** • Extract A refers to the fact that 'Students from all backgrounds are more likely to go to university than ever before' • Poorer students are continuing to attend university and various schemes exist to support them • Questioning the extent of the effect over time. How significant is this? Are tuition fees a significant contributor to drop-out rates? • Judgement should focus on how important this effect is NB KAA can be treated as Evaluation and vice versa	**(4)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	**1–2**	Identification of generic evaluative comments without supporting evidence/ reference to context. No evidence of a logical chain of reasoning.
Level 2	**3–4**	Evaluative comments supported by chains of reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question.

Question Number	Answer	Mark
(c)	**Knowledge 2, Application 2, Analysis 2** **Knowledge/understanding** • Identification of one external and one private benefit: tax revenue (external); higher earnings (private) (1+1) **Application** 2 marks for, e.g. • 'the government will benefit greatly from additional tax revenues' (1) • 'the rest will be in the form of their extra spending power' (1) **Analysis** Linked development of why the education specifically benefits producers e.g. higher productivity enable firms to achieve lower costs and, therefore, lower prices (1+1) **Award up to 3 marks for each benefit**	**(6)**

Question Number	Answer	Mark
(d)	**Knowledge 2, Application 2** Formula for percentage calculation (new-old)/old x 100. (1) (102357 – 45418)/45418 x 100 (1+1) = Accept any figure between 125 and 126 **NB Award 4 marks for a correct answer of 125%. Award up to 3 marks for correct working.**	**(4)**

Question Number	Answer	Mark
(e)	**Knowledge 3, Application 3, Analysis 3** • The top five subjects generate earnings significantly above the average when compared to non-graduates whereas the bottom five reduce earning potential. Charging different fees would allow universities to maximise their own earning potential • Students would pay because they can clearly see that the benefits outweigh the costs • Some subjects cost more to staff, so they should cost more, allowing less expensive degrees to be reduced in price • Provide improved courses / give students better educational experience/attract more domestic students • Provide more funds to look after disadvantaged students • Improved courses will attract overseas students • Allow universities to cover the true cost of some courses. Examine variable fees in terms of allocation of resources • Discuss the consumer pays principle. Consumers i.e. students who benefit from university education (premium of £10 000) should pay/contribute to the cost? • Discuss the government / taxpayer role in financing higher education • Long term supply side benefits e.g. more skilled work force	**(9)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	**1–3**	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	**4–6**	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response; chains of reasoning are developed but the answer may lack balance.
Level 3	**7–9**	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Answer	Mark
(e) continued	**Evaluation 6** • Difficult to quantify exactly what should be charged for what subjects – figures can change over time • May be problematic for those from poorer families, who may see the higher cost of certain degrees as prohibitively expensive • Discussion of the concept of a 'broader education' – are degree choices simply about money. A creative arts subject may reduce earning potential when compared to the average but such subjects are essential for any liberal education	**(6)**

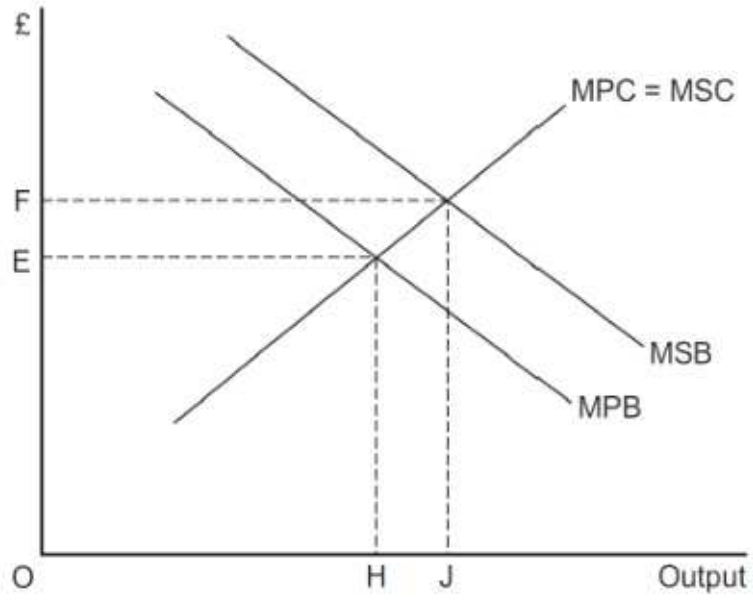
Level	Mark	Descriptor
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Level 1	**1–2**	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	**3–4**	Evidence of evaluation of alternative approaches which is unbalanced. Evaluative comments with supporting evidence/reference to context and a partially developed chain of reasoning.
Level 3	**5–6**	Evaluative comments supported by relevant chain of reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question.

Question Number	Answer	Mark
(f)	**Knowledge 4, Application 4, Analysis 6** The extracts contain plenty of examples from an international context. • Re-designing the structure of fees in England according to the 'value of the degree' • This could be done by subject, institution etc. • Cutting fees for poorer groups and introducing maintenance grants • The US model where top institutions charge high fees and state universities much lower ones • The European model of lower fees • A graduate tax as in Germany • Discussion of efficient/inefficient allocation of resources • Education as a merit good • External benefits application (with appropriate diagram) • Impact on income inequality/fairness/impact on poorer communities • Free market system will discourage 'fringe degrees' and focus on degrees that offer more vocational benefits that pay higher salaries (Good or bad?) Candidates may use supply and demand analysis to develop the idea of different subjects charging different fees.	**(14)**

Level	Mark	Descriptor
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Level 3	**7–10**	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to apply economic concepts and relate them directly to the broad elements of the question with evidence integrated into the answer. Analysis is clear and coherent, although it may lack balance. Chains of reasoning are developed but the answer may lack balance.
Level 4	**11–14**	Demonstrates precise knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using appropriate examples. Analysis is relevant and focused with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Answer	Mark
(f) continued	**Evaluation 6** England is similar to the U.S. and quite different from Europe • Good evaluation will consider the strengths and weaknesses of each method • European approaches recognise the increase in graduate earning potential and the much higher taxes that graduates will pay in the future. They are much cheaper at the point of use and encourage applicants from poorer families. The taxpayer pays the majority of the cost at the point of use • U.S. and English approaches recognise that the consumer of education must pay at the point of use and be prepared to make a personal investment in future earning power. Students are encouraged to consider whether their degree is worth the cost. If creative arts confer no benefits, then why study them?	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	**1–2**	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	**3–4**	Evidence of evaluation of alternative approaches which is unbalanced leading to unsubstantiated judgements. Evaluative comments with supporting evidence/reference to context and a partially developed chain of reasoning.
Level 3	**5–6**	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question, leading to a substantiated judgement.

Question Number	Answer	Mark
(g)	**Knowledge 4, Application 4, Analysis 6** Education creates positive externalities in consumption. Left to the market alone there will be under-consumption of education. This can be illustrated through an externalities diagram:  	

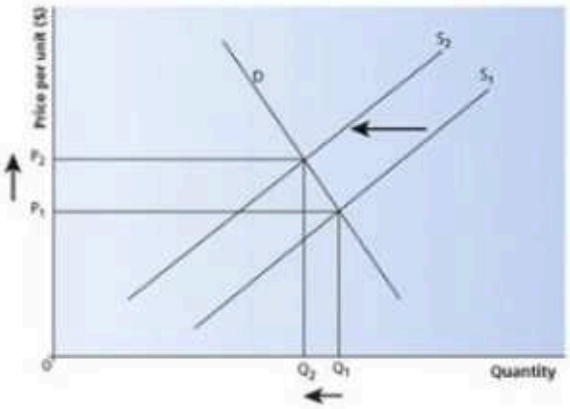
	• The diagram below shows the marginal private benefit (MPB) and marginal social benefit (MSB) curves and the marginal private cost (MPC) and marginal social cost (MSC) curves for higher education • The external benefits of education are social benefits that spillover to benefit others in the society and future generations. These include lower government health, welfare, and prison costs; strengthened democracy, human rights, political stability, and social capital; less crime and poverty; environmental benefits; better international competitiveness; new ideas and diffusion of technology • Government intervention can be used to ensure that the optimum quantity of education, J, is consumed rather than the free market outcome at H	**(14)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	**1–3**	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
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Level 4	**11–14**	Demonstrates precise knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using appropriate examples. Analysis is relevant and focused with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Answer	Mark
(g) continued	**Evaluation 6** • There is a significant issue of measurement where externalities are concerned • Many of the social benefits identified above are 'vague' and ambiguous • As a result there can be considerable 'government failure' in education • Understanding of government failure as intervention that results in a net welfare loss; how is government supposed to know which degree level subjects are in demand in the future? • Causes of government failure: o distortion of price signals o unintended consequences o excessive administrative costs o information gaps	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	**1–2**	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	**3–4**	Evidence of evaluation of alternative approaches which is unbalanced leading to unsubstantiated judgements. Evaluative comments with supporting evidence/reference to context and a partially developed chain of reasoning.
Level 3	**5–6**	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question, leading to a substantiated judgement.

Q7.

Question Number	Answer	Mark
(a)	**Knowledge 2, Application 2** **Knowledge** • Supply and demand diagram annotated to show a left shift in the supply curve (2) **Application** • New equilibrium price (1) • New equilibrium quantity (1)  NB – Award up to 2 diagrammatic application marks for other microeconomic effects based on correct knowledge e.g. – changing Consumer Surplus (1) or Producer Surplus (1) or Revenue (1) or Shortage (1)	**(4)**

Question Number	Answer	Mark
(b)	**Analysis 1** **The only correct answer is A** **B** is not correct because the potential output is not likely to increase **C** is not correct because A is more likely than C which illustrates a reallocation of resources towards consumer goods. If anything a reallocation of resources towards more capital goods is more likely **D** is not correct because this illustrates an increase in actual output which the stem to the question does not provide evidence for	**(1)**

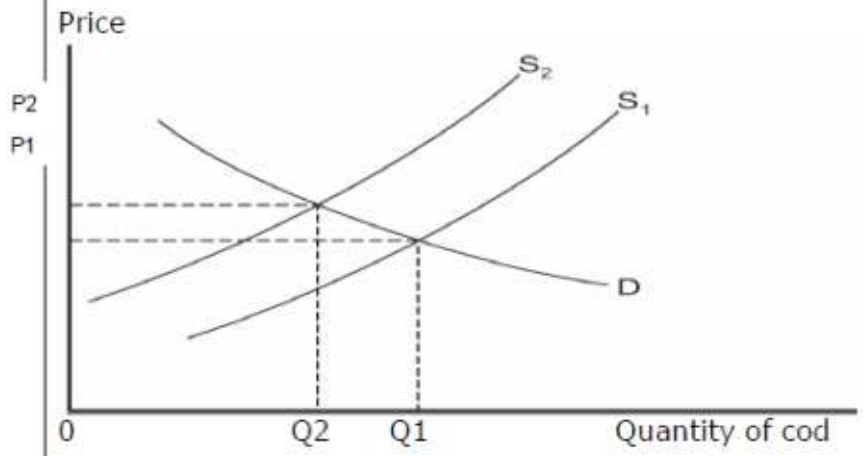
Q8.

Question Number	Answer	Mark
(a)	**The only correct answer is A** ***B*** *is not correct because the candidate has divided by the new year rather than the original year* ***C*** *is not correct because the candidate has looked at the difference in quantity sold between 2014 and 2015 rather than answering the question between 2011 and 2015* ***D*** *is not correct because the candidate has looked at the decrease in the quantity of PC's not the percentage decrease*	**(1)**

Question Number	Answer	Mark
(b)	**Knowledge 1, Analysis 1** **Knowledge:** 1 mark for likely reason in the decrease in sales of PCs e.g. • Development of substitutes such as Tablets or iPads or iPhones (1) • Fall in global real incomes (1) • Fall in price of substitutes (1) **Analysis:** 1 mark for linked development e.g. • Tablets are more convenient to carry round (1) • New technology in other personal devices so becoming more powerful in their functions (1) • Fall in global incomes means that consumers are less likely to buy normal goods such as PCs (1)	**(2)**

Question Number	Answer	Mark
(c)	**Application 2** **Application 2** 1 mark for appropriate calculation /formula e.g. the sum of 5 largest figures = 190 239 (1) $\frac{190\ 239\ \text{(million)}}{276\ 700\ \text{(million)}} \times 100$ Answer = **68.8%** (Accept between 68% and 69%) **Award 2 marks for correct answer (68.8)**	**(2)**

Q9.

Question Number	Answer	Mark
(a)	**Knowledge 1, Application 2, Analysis 2** **Knowledge** 1 mark for original supply and demand diagram with original equilibrium **Application** 2 marks for using source data explaining change in supply e.g. • Cod catch limits cut (1) by 50% (1) • Reduced limited TACs agreed for Celtic Sea/Irish Sea/west of Scotland (1) • Relevant use of data from Figure 1 (1+1) e.g. Identifying the country that is overfishing (1) Identifying the amount of overfishing (1) **Analysis** Accurate diagram – showing price rise or candidate states price rise (1) correct shift in supply (1) e.g.  	**(5)**

Question Number	Indicative content	Mark
(b)	**Knowledge 2, Application 2, Analysis 2** Reasons why fishing as much as possible is rational • **This is completely rational from the perspective** of a fishing company, which has revenues clearly linked to size of catch. • Shows an understanding of profit maximising behaviour. **'Private producers will act in their own self-interest and exploit common access resources to maximise profit.'** • **Figure 1 shows Sweden fishing at an excess of 52.4% in excess of TAC.** • Using techniques to increase the size of the catch will help to minimise costs • **'Common access resources provide an opportunity for individuals to create profit, while spreading negative externalities to everyone else.'** **NB KAA can be treated as Evaluation and vice versa**	**(6)**

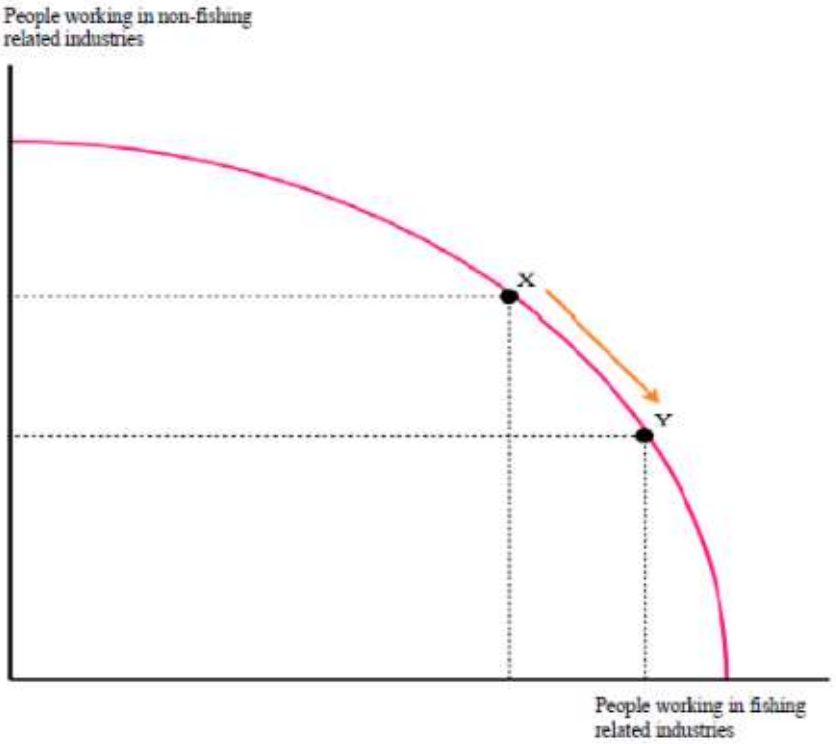
Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–2	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no link between causes and consequences.
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Question Number	Indicative content	Mark
(b) continued	**Evaluation 4** Reasons why fishing as much as possible is irrational: • 'Exploitation is unsustainable and will lead to the depletion of resources; this is known as the tragedy of the commons.' • Short run profits means that stocks are rapidly depleted so in the long run there are no resources for them to fish e.g. individual firms find that dwindling fish stocks mean their own revenue base is contracting. '90% of fish stocks are depleted.' • It may be rational for firms to behave this way but also it is harmful to society of which those firms are a part e.g. negative externalities impact society as a whole	**(4)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/ reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evaluative comments supported by chains of reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question.

Question Number	Answer	Mark
(c)	**Knowledge 2, Application 2 Analysis 2** **Knowledge and Analysis (1+1)x2** • Excludability (1) e.g. private ownership enables individuals to charge for the use of an asset (1) • Private ownership of resources (1) e.g. land, labour, capital and enterprise may be exploited by private individuals or firms (1) • Rivalry (1) e.g. private owners of resources can choose to buy and sell resources in order to generate profit (1) • Private ownership in a free market economy may lead to wage disparities or other inequalities (1+1) **Application (1+1)** 1 mark for use of Extract B e.g. 'private producers will act in their own self-interest' individuals 'maximise profit' 1 mark for use of own knowledge e.g. private ownership of a resource means someone is accountable for it (1) If someone owns something then they legally stop other people from using it (1)	**(6)**

Question Number	Answer	Mark
(d)	**Knowledge 2, Application 2** 1 mark for e.g. Identifies the correct formula (1) e.g. the formula for XED is %ΔQD Good A/%ΔP Good B -8 = x/2% (1) -8 x 2% = -16% (1) (decrease in quantity demanded of bags of chips) 950 000 x 16% = 152 000 (1) 950 000 – 152 000 (1) = **798 000** **If correct answer is given award all 4 marks. Award up to 3 marks for correct working but overall correct answer missing.**	**(4)**

Question Number	Indicative content	Mark
(e)	**Knowledge 3, Application 3, Analysis 3** Impacts can be positive or negative. • Understanding of specialisation. The number of workers in the fishing industry relative to other workers will be more in Scotland relative to the rest of the UK:  **NB If there is no valid diagram - maximum level 2 KAA**	

	Advantages might include: • Fishing fleets develop expertise based on years of experience • This will be the case for both labour and capital • Fishing ports have the infrastructure to process the catch and to distribute it to markets in the UK and overseas • Employment opportunities will be available and will grow as the industry develops • Specialisation enables training providers to specialise in developing skills for workers in the region - more resources can go in to	**(9)**

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	preparing for fishing industry without having to invest in training in other areas. • Spillover effects - skilled labour more freely available so if a new worker is needed they can benefit from training with a different company • Efficient use of resources – a region that specialises in fishing due to availability of resources e.g. good fishing grounds. • Creates jobs – people of Scotland will be able to find employment in the fishing industry • Scotland specialising in the production of fish can catch more and then trade with other countries who specialise in the production of other goods. • By catching more fish the economy can sell these, increasing income in the Scottish economy • By specialising and division of labour increasing output/ reducing costs of production the economy can improve income, living standards. **NB KAA can be treated as Evaluation and vice versa**	

Level	Mark	Descriptor
	0	A completely inaccurate response.
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Question Number	Indicative content	Mark
(e) continued	**Evaluation 6** There are many disadvantages of specialising in the production of goods and services to trade: • Over-exploitation of resources leaves economic agents over-exposed, leading to possible business failures and job losses • The reduction of the cod TAC could lead to major issues for Scottish fishing • External costs related to congestion and pollution • Demand for fish falls with the increased trend towards vegetarianism and veganism, the economy would be at risk • Workers could find it difficult to transfer to other industries if they are over-specialised • Current consumption may be unsustainable leading to reduced incomes for future generations	**(6)**

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	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
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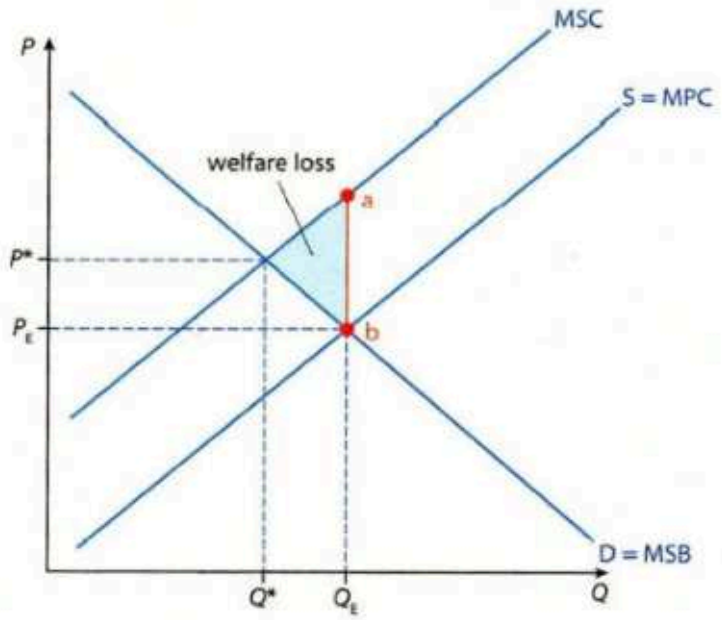
Question Number	Indicative content	Mark
(f)	**Knowledge 4, Application 4, Analysis 6** Overfishing is a negative externality in production. Diagram e.g.  **NB If there is no appropriate diagram - maximum level 3 KAA**	

	Figure 1 shows the scale of the overfishing for different nations, e.g. Sweden's TAC is 52.4% above what the scientists advise. Multiple external costs are referred to in the Extracts. Extract B states that '90% of fish stocks are depleted.' The cod TAC should be reduced in order to reduce the extent of the overfishing. This would reduce the quantity caught from Q_E to Q*. Possible external costs/third parties that might be affected • Fishing nets can damage wildlife, costing wildlife charities to rescue and rehabilitate animals • Fishing boats spill oil which has a negative impact	**(14)**

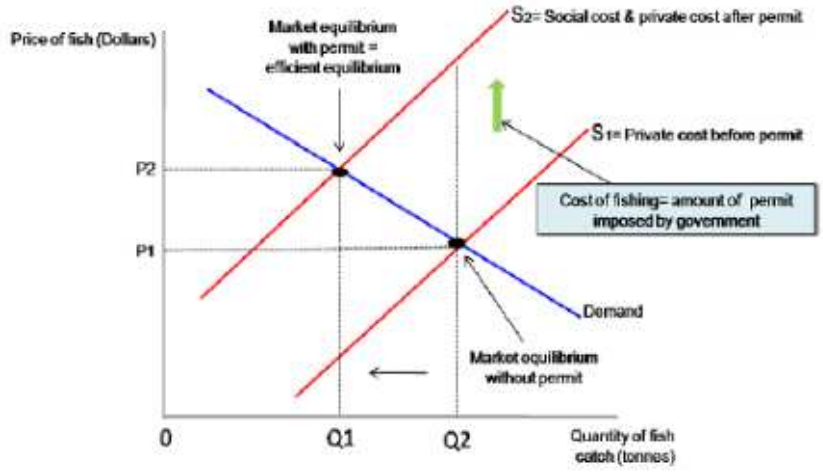
	on those swimming in the sea or wildlife, clear up for Environment Agency etc • Fishing industry throws any over catch back in to the sea, this can pollute the water • Smell from fishing industry can have a negative impact on those that live near the ports • Overfishing increases supply - lowers price and this has negative impact on manufacturers of other food items.	

Level	Mark	Descriptor
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Question Number	Indicative content	Mark
(f) continued	**Evaluation 6** • Hard to put a value on external costs - how do you value harm to wildlife • Some impacts are slow to emerge • External benefits may exist - jobs in fish food processing plants, boat building and net making industries • Technology improves meaning risk of oil spills reduces • Net manufacturers are developing safer nets - fishing industry more aware of the need to dispose of nets appropriately • New method of fishing are reducing the external costs • TACs have helped to reduce the external costs	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evidence of evaluation of alternative approaches which is unbalanced leading to unsubstantiated judgements. Evaluative comments with supporting evidence/reference to context and a partially developed chain of reasoning.
Level 3	5–6	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question, leading to a substantiated judgement.

Question Number	Indicative content	Mark
(g)	**Knowledge 4, Application 4, Analysis 6** **Do not award policies involving changes in the total allowable catch (TAC) per country** There are a range of policy options available to reduce over-fishing: Ways might include: • Provision of information, so that consumers can be encouraged to consume sustainably • Regulation e.g. designated areas for fishing allowing stocks to recover • Extension of property rights to international waters • Agreements on shares of fish that can be caught • Imposing indirect tax on fish to reduce consumption • Subsidy paid to firms to use safer technology • Minimum price for fish • Government permits awarded to fishing companies may be tradable • The answer may be supported using a relevant diagram e.g.	**(14)**



NB If there is no appropriate diagram - maximum level 3 KAA

Level	Mark	Descriptor
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Question Number	Indicative content	Mark
(g) continued	**Evaluation 6** Evaluation of policies might include; • Unintended consequences, such as illegal fishing • Excessive administrative costs • Information gaps, with consumers unaware of the extent of the damage being caused by over-fishing, not knowing level of tax to implement etc. • UK may increasingly over-fish since leaving the EU • Relative benefits/costs of government intervention versus market-based solutions • Government unaware of the right level of intervention	**(6)**

Level	Mark	Descriptor
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Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
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Q10.

Question Number	Answer	Mark
(a)	**Knowledge 1, Application 2, Analysis 2** **Knowledge/understanding** 1 mark for infinite wants and finite resources (1) **Application** 1 mark each for any one of the following for infinite wants: • Consumers of health care have a growing list of medical concerns for essential/non essential treatment/waiting list 4 million (1) • Ageing population (1) • New medical technologies(1) 1 mark each for any one of the following for finite resources: • Number of doctors/nurses (1) • Number of hospital beds available/bed occupancy rates 99% (1) use of Figure 2 e.g. • Waiting time has increased from 5.7% (1) to 10.7% (1) **Analysis** Up to 2 marks for any one of the following in linked development OR two limited examples of analysis (1+1): • Health resources are scarce (1) so Hospitals have to make choices about who to treat (1) • Decisions need to be made on what, how, why and for whom to treat (1+1) • Opportunity cost of making a medical choice/decision (1) • Government health priorities (1)	**(5)**

Question Number	Answer	Mark
(b)	**Knowledge 2, Application 2, Analysis 2** **Knowledge/understanding** 2 marks for e.g. • producers know more than consumers (1) or the information is incomplete or imperfect (1) • misallocation of resources (1) **Application** 1+1 mark for e.g. • risk of requiring health care is an unknown (1) • Doctors know more than patients (1) **Analysis** Up to 2 marks for any one of the following in linked development to market failure OR two limited examples of analysis (1+1): • Under consumption of healthcare (1) so patients' health conditions deteriorate (1) • Consumers overcharged for health treatment (1) as they are unaware of the true cost of health care (1) • Unnecessary treatment (1) as consumers unaware of health needs (1) • Patients lack of awareness of waiting times and NHS priorities (1)	**(6)**

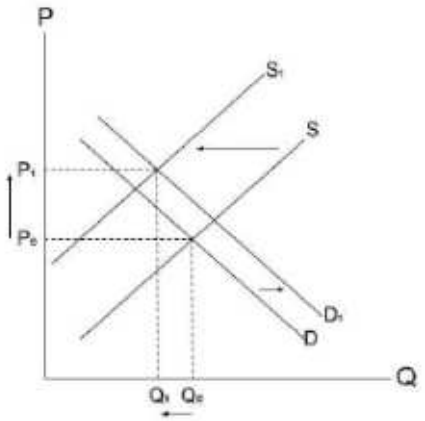
Question Number	Indicative content	Mark
(c)	**Knowledge 2, Application 2, Analysis 2** • Knowledge – public goods are non-excludable and non-rivalrous • Application - Extract C suggests public parks exhibit these features Reasons why they are public goods • 'free use' i.e. do not have to pay to enter • 'share the park with other users' • 'no exclusive use of the park' • Park run users 'share the park' with other users indicating one person using the park for a run does not have an impact on another person's enjoyment so non-rival. **NB Reasons for/against being a public good may be presented as either KAA or EV**	**(6)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–2	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no link between causes and consequences.
Level 2	3–4	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response or the answer may lack balance.
Level 3	5–6	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are applied appropriately to the broad elements of the question.

Question Number	Indicative content	Mark
(c) continued	**Evaluation 4** Reasons against being public good • Local authorities planning on charging parkrun participants using public parks • Public parks already have exclusive areas e.g. booking tennis courts or football pitches • Parks may be rivalrous in consumption e.g. Hundreds of park run participants may get in the way of other users. • Parks are also excludable because they already have exclusive areas, gates can be closed at certain times	**(4)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/ reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evaluative comments supported by chains of reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question.

Question Number	Answer	Mark
(d)	**Knowledge 2, Application 2** £12 * 450 million (1) = £5.4 billion (1) £5.4 billion * 90% = £4.86 billion (1) £5.4 billion - £4.86 billion (1) = £0.54 billion £5.4 billion * 10% (1) = £540 million (1) **NB Award 4 marks for a correct answer of £540 million/£0.54 billion. Award up to 3 marks for correct working but overall correct answer missing.**	**(4)**

Question Number	Indicative content	Mark
(e)	**Knowledge 3, Application 3, Analysis 3** Demand shifting right and/or Supply shifting left e.g.  Reasons for demand shifting right: • Ageing population, migration • Medical technological advances • NHS as a substitute less attractive, inferior good, waiting times. • Peer pressure Reasons for supply shifting left: • high management and administrative costs • salaries/wages rising due to doctor/nurse shortages • removal of subsidy/higher tax on private health care treatment • rising rents of private hospitals • rising cost of machinery in health care. **NB For Level 3 KAA one relevant diagram.**	**(9)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–3	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no link between causes and consequences.
Level 2	4-6	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response or the answer may lack balance.
Level 3	7-9	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are applied appropriately to the broad elements of the question.

Question Number	Indicative content	Mark
(e) continued	**Evaluation 6** • Magnitude depends on how proportionately large the shift in demand or supply is as a key determinant • Price elasticity of demand may be more price elastic in the long run, given improvements in the NHS, discouraging further price increases • Price elasticity of supply may be relatively price inelastic, given health infrastructure, so price rise may be very significant • Other factors may reduce price e.g. government subsidies, productivity gains, healthier lifestyles.	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–3	Identification of generic evaluative comments without supporting evidence/ reference to context. No evidence of a logical chain of reasoning.
Level 2	4–6	Evaluative comments supported by chains of reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question.

Question Number	Indicative content	Mark
(f)	**Knowledge 4, Application 4, Analysis 6** Define excess demand. Application of excess demand to state funded health care. Government interventions: Factors influencing demand and supply (PES) that may result in the removal of excess demand (new hospitals built/doctors trained). Purpose of intervention with reference to market failure and using diagrams in various contexts: • government spending on direct provision increases supply • charging for NHS health care rations • indirect taxation (ad valorem or specific) on sugar/high fat content food/drinks or cutting taxes on healthier lifestyle options • subsidies on healthy food/gym memberships • maximum and minimum prices on healthy and unhealthy food/drinks Other methods of government intervention: • state provision of public goods e.g. public parks • provision of information e.g. 5 a day • regulation e.g. restricting sugar content • o subsidising private treatment	**(14)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–3	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	4–6	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response or superficial, two stage chains of reasoning only.
Level 3	7–10	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to apply economic concepts and relate them directly to the broad elements of the question with evidence integrated into the answer. Analysis is clear and coherent, although it may lack balance. Chains of reasoning are developed but the answer may lack balance.
Level 4	11–14	Demonstrates precise knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using appropriate examples. Analysis is relevant and focused with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Indicative content	Mark
(f) continued	**Evaluation 6** Government failure to reduce excess demand. Understanding of government failure as intervention that results in a net welfare loss; consumers face an under provision of food/drink that satisfies them i.e. marginal social benefits now exceed marginal social costs. Consumer choice restricted e.g. heavily subsidised healthy school meals and regulations against unhealthy options. Causes of government failure: • distortion of price signals • unintended consequences – charging for health care results in under consumption. • excessive administrative costs • information gaps – what is healthy, concerns about low sugar food/drink contents • time lag of the policies • magnitude depending on size of funding change. Irrational consumer behaviour - peer pressure.	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evidence of evaluation of alternative approaches which is unbalanced leading to unsubstantiated judgements. Evaluative comments with supporting evidence/reference to context and a partially developed chain of reasoning.
Level 3	5–6	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question, leading to a substantiated judgement.

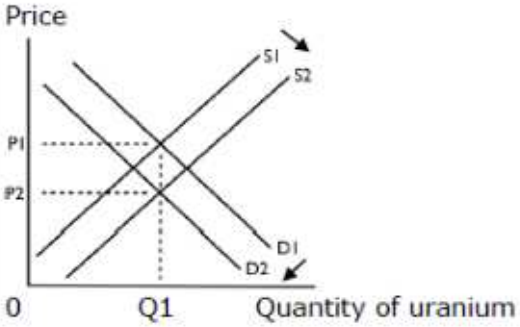
Question Number	Indicative content	Mark
(g)	**Knowledge 4, Application 4, Analysis 6** Distinction between free market, mixed and command economies: reference to Adam Smith, Friedrich Hayek and Karl Marx Disadvantages of free market approach: • Free market under provision of health services, with large external benefits (SMB>SMC analysis), below social optimum. • Sick unable to work – loss of potential output, PPF. • Addressing concerns on affordability to access health care, insurance and information gaps e.g. preventative earlier treatments for elderly and children. • Misallocation of resources on administration of charges. • Profit incentive misallocating resources ahead of patient needs. • Asymmetric information on need to pay for treatment and quality of care. • Missing markets for elderly, children, remote rural areas.	**(14)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–3	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
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Level 4	11–14	Demonstrates precise knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using appropriate examples. Analysis is relevant and focused with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Indicative content	Mark
(g) continued	**Evaluation 6** Functions of the price mechanism to allocate resources in private health sector or NHS: • rationing • incentive • signalling • 'Private health care increases choice for users, encourages competition and drives up standards of care.' • Mixed economy acts as a compromise between the advantages and disadvantages of a free market economy and a command economy. • Mixed economy features disadvantages of both a free market economy and a command economy and has no advantages of either. • NHS is more efficient and offers better care than private sector so why allow private sector to exist. • NHS waiting lists and lack of choice. • Information failures.	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evidence of evaluation of alternative approaches which is unbalanced leading to unsubstantiated judgements. Evaluative comments with supporting evidence/reference to context and a partially developed chain of reasoning.
Level 3	5–6	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question, leading to a substantiated judgement.

Q11.

Question Number	Answer	Mark
(a)	**Knowledge 1, Application 2, Analysis 2** **Knowledge** 1 mark for an increase in supply or a decrease in demand. This may be illustrated on a diagram **Application** 2 marks for using source data explaining change in supply and demand, e.g. • Estimated surplus (1) of approximately 7 million kg of uranium (1) • Kazakhstan's production has increased significantly/stockpiles (1) • Confidence in nuclear industry declined/Japan closed some of its nuclear plants (1) **Analysis** Accurate diagram – showing price fall (1) correct shift in demand **and** supply (1) e.g.  	**(5)**

Question Number	Indicative content	Mark
(b)	**Knowledge 2, Application 2, Analysis 2** • Shows or demonstrates understanding of price elasticity of supply. • Reasons why uranium is price inelastic. • Diagram to show price inelastic supply. • Time. Two years to build a uranium mine in Spain, ten years in 'development', difficult to find in right concentrations. • Factor immobility e.g. uranium mine cannot be switched to other uses • Regulation. 'Have to clear extra hurdles' due to government concerns regarding negative externalities. **NB KAA can be treated as Evaluation and vice versa**	**(6)**

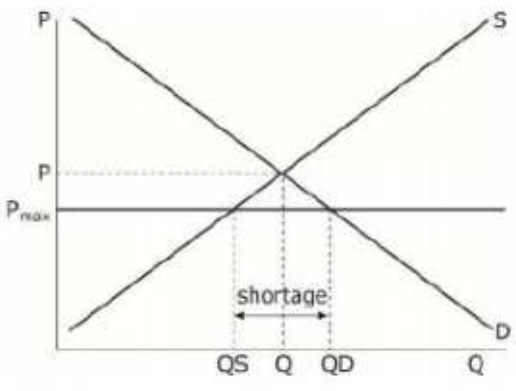
Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–2	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no link between causes and consequences.
Level 2	3–4	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response or the answer may lack balance.
Level 3	5–6	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are applied appropriately to the broad elements of the question.

Question Number	Indicative content	Mark
(b) continued	**Evaluation 4** Reasons why uranium is price elastic: • Time. Ability to store stockpiles of uranium, Figure 1 surplus suggests and 'stockpiles until 2020'. • 'Uranium is a relatively common metal'. Extract A Line 2 • Distinction between short run and long run and its significance for elasticity of supply. By 2018 mine in Uranium producing '2.2 million kilos a year'.	**(4)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/ reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evaluative comments supported by chains of reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question.

Question Number	Answer	Mark
(c)	**Knowledge 2, Application 2 Analysis 2** **Award up to 3 marks for each reason:** **Knowledge/understanding** • Identification of two separate reasons: inertia, computational problems, information gap, all providers increasing prices over time. (1) **Application** 1 mark for, e.g. • 'Irrational consumers pay the price'. (1) • Energy prices have risen by 158% in the last 15 years.(1) • Four million households are still on the most expensive energy rates. (1) **Analysis** Linked development of why not switching to a supplier offering lower prices (1) **e.g.** • Inertia (1) despite a decade of rising energy bills (1) as consumers do not have the time or motivation to switch (1).	**(6)**

Question Number	Answer	Mark
(d)	**Knowledge 2, Application 2** **Knowledge/understanding** 2 marks for e.g. Renewable energy is a resource made from something which can be renewed itself/infinite supply (1) Non-renewable energy is a resource which once exploited cannot be replaced/finite supply (1). **Application** 2 marks for, e.g. Energy generated by nuclear or coal is non-renewable (1) Solar or wind energy is renewable (1).	**(4)**

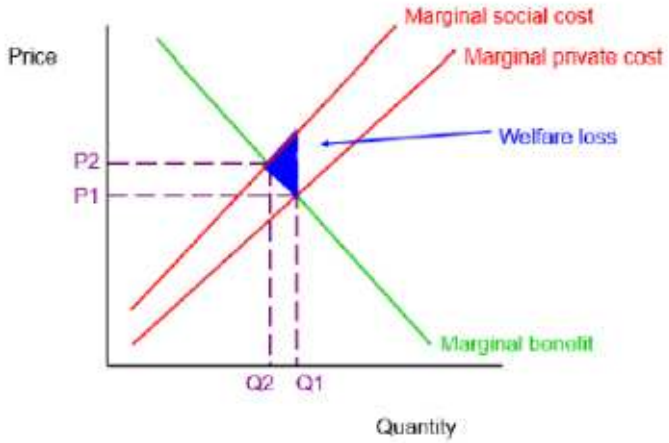
Question Number	Indicative content	Mark
(e)	**Knowledge 3, Application 3, Analysis 3** • Understanding of maximum price.  The effect of a maximum price on consumers: • Energy prices more affordable for consumers, end of 'decade of rising energy bills', extension in demand for energy or increase in quantity demanded (inefficient use). The effect of a maximum price on producers: • Contraction in supply or decrease in quantity supplied, power stations turned off 'undermine energy market', decline in producer surplus or revenue/profit. **NB Level 3 responses must consider the effects on both energy consumers and producers.** **NB If no valid diagram then the maximum of Level 2 may be awarded**	**(9)**

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	0	A completely inaccurate response.
Level 1	1–3	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
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Level 3	7–9	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

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Question Number	Indicative content	Mark
(e) continued	**Evaluation 6** • It depends on whether and how far the maximum price is below the market equilibrium price. • It depends on the PES of energy. • It depends on the PED for energy. • Comment on the costs to consumers – loss of consumer surplus, energy shortages, 'higher prices in the future'. • Comment on the impact on producers – producer behaviour e.g. may move up to the price cap, reduce investment • Government failure e.g. distortion of price signals, unintended consequences	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evidence of evaluation of alternative approaches which is unbalanced. Evaluative comments with supporting evidence/reference to context and a partially developed chain of reasoning.
Level 3	5–6	Evaluative comments supported by relevant chain of reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question.

Question Number	Indicative content	Mark
(f)	**Knowledge 4, Application 4, Analysis 6** **External Cost:**  Diagram(s) accurately drawn – with clearly labelled 'welfare loss' shaded triangle Explain costs to third parties in context. External costs: • Risk of nuclear accident – local schools and businesses close, impact on property prices. • High doses of nuclear radiation leaks increase the risk of cancer – loss of family income, employment, contribution to local economy, costs to NHS. • Cost of storage for future generations – opportunity cost of resources (land) tied to this, resulting in loss of income to farmers for example. • Opportunity cost of subsidies to nuclear industry, subsidy cuts to solar businesses. **NB KAA can be treated as Evaluation and vice versa** **NB If there is no Diagram, max Level 3**	**(14)**

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Level	Mark	Descriptor
	0	A completely inaccurate response.
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Level 4	11–14	Demonstrates precise knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using appropriate examples. Analysis is relevant and focused with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Indicative content	Mark
(f) continued	**Evaluation 6** Reduced external costs in production of substitutes/external benefits may mean it is under-produced: • Curb greenhouse gas emissions which are causing climate change, by using nuclear, resulting in less flooding or storm damage reducing insurance costs to businesses. Extract C • Building new nuclear reactors allow positive local economic effects from job creation. • Provide 'affordable energy' helping businesses stay open thus protecting jobs and ending fuel poverty resulting in lower demands for health care. Other evaluation points might include: • Magnitude – depends on relative size of external cost. • Measurement difficult – putting a value on external costs. • Energy efficiency measures more preferable. • Short term/long term costs and benefits.	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evidence of evaluation of alternative approaches which is unbalanced leading to unsubstantiated judgements. Evaluative comments with supporting evidence/reference to context and a partially developed chain of reasoning.
Level 3	5–6	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question, leading to a substantiated judgement.

Question Number	Indicative content	Mark
(g)	**Knowledge 4, Application 4, Analysis 6** Reasons for government intervention e.g. to correct market failure Link intervention to reducing carbon emissions. Appropriate diagram(s) accurately drawn. Ways might include: • Indirect taxation (ad valorem and/or specific) on carbon emissions providers e.g. coal/gas power stations, or workplace parking, reference to taxes directed at getting people out of their cars • Subsidies to solar/wind/nuclear energy/cycling/public transport • Maximum price on low/zero carbon emissions providers and minimum prices on carbon emitters. • Tradable pollution permits e.g. EU emissions trading scheme. • Provision of information, energy efficiency measures. • Regulation e.g. shut down all coal-fired power stations by 2025, reduction in car emissions by using low emission zones. **NB KAA can be treated as Evaluation and vice versa** **NB If there is no Diagram, max Level 3**	**(14)**

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	0	A completely inaccurate response.
Level 1	1–3	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
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Level 4	11–14	Demonstrates precise knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using appropriate examples. Analysis is relevant and focused with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Indicative content	Mark
(g) continued	**Evaluation 6** Why the ways given may or may not be successful e.g. • Distortion of price signals. • Unintended consequences, energy shortages. • Excessive administrative costs, pollution permits. • Information gaps, external costs of non-carbon based energy sources, questioning link between carbon emissions and climate change. • Government failure to provide, solar and wind power 'vary with weather', nuclear accidents. • Relative benefits/costs of government intervention versus market based solutions.	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evidence of evaluation of alternative approaches which is unbalanced leading to unsubstantiated judgements. Evaluative comments with supporting evidence/reference to context and a partially developed chain of reasoning.
Level 3	5–6	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question, leading to a substantiated judgement.

Q12.

Question Number	Answer	Mark
(a)	**Knowledge 1, Application 2, Analysis 2** **Knowledge and Analysis:** (up to 3 marks) • Understanding of a positive statement e.g. statement of fact that can be tested (1) • Understanding of a normative statement e.g. statement containing a value judgement (1) Further analysis of the difference (1) e.g. • a positive statement is not linked to political viewpoint • these normative statement represents the value judgement of the Prime Minister/current political party • objective v subjective • Scientific method **Application:** up to 2 marks 1 for positive and 1 for normative for each example from the extract Normative example (up to 1 mark) • the regulator 'should' limit the standard variable tariff (1) • offer fairer prices for customers who are paying too much (1) • 'a price cap will not be good for consumers' (1) • The market is broken (1) Positive example (up to 1 mark) • Energy bills of 11 million households will be capped (1) • Save households up to £100 (1)	**(5)**

Question Number	Answer	Mark
(b)	**Knowledge 2, Analysis 2, Application 2, Evaluation 2** **Knowledge/understanding:** 2 marks for identification of two likely benefits to the consumers (1+1) e.g. • Lower prices • Improved product quality • More innovative products • Better customer service • Better bundles/packages/choice **Analysis:** 1 mark for linked explanation of each identified benefit (1+1) e.g. • A benefit to the consumer is cheaper prices (1K) as BT has greater purchasing power (economies of scale) OR consumers can buy more goods/services with their income OR increased consumer surplus (1An) • A benefit to the consumer is the greater availability of bundles/packages (1K) this therefore means that they can spend less overall when buying products together rather than individually on separate contracts(1An)	

	Application: 2 marks for reference the context of the BT and EE takeover (1+1), e.g. • Multi-brand strategy (1) • Mix of BT, EE and Plusnet services (1) • Greater value bundles of services (1) • Compete for their business (1) • Controlling 35% of market share (1) **Evaluation:** 2 marks for two evaluative comments, OR 2 marks for identification and linked development of one evaluative comment e.g. • Potential problems to the consumer ○ Higher prices in the LR due to diseconomies/monopoly power/x-inefficency ○ Lack of choice as control 35% of market ○ Restriction of new competitors ○ Slowed pace of technology ○ Poor customer service • Depends on the actions and behaviour of rival firms • Depends on the extent to which cost saving measures are passed on to the consumer • Depends on the degree of future regulation within the industry	**(8)**

Question Number	Indicative content	Mark
(c)	**Knowledge 2, Application 2, Analysis 2** **Information gaps as main cause of consumers failing to switch** ➢ Consumers lack market information on the price of their landline bill in relation to other providers ➢ Main target audience (the elderly) lacks the knowledge to shop around online and use price comparison sites ➢ Switch to online billing and direct debit payments means many households are unaware ➢ Automatic price changes made by BT ➢ Hard to compare prices as all bundles comprise of different services ➢ Lack of awareness of competitor prices and packages	

	Irrational behaviour as main cause of consumers failing to switch ➢ Computation issues e.g. consumers do not understand their pricing structure ➢ Habitual behaviour/status quo bias/brand loyalty e.g. consumers may have a tendency to purchase the same service over time ➢ Consumers do not have the time to shop around or look for better deals ➢ Consumers want to avoid the disruption of changing provider ➢ Strong brand of BT leading to an inelastic demand Other factors could be causing this: ➢ Misleading advertising or price plans ➢ Lack of provision in all areas e.g. fibre optic or bundles ➢ Tie in contracts & automatic renewals ➢ Information overload ➢ Size of savings may not be significant enough to go through switching ➢ Line quality may vary so not similar packages/non-price considerations make BT offer the best. **NB For Level 3 response candidates need at least two reasons but are not required to use both 'information gaps' and 'irrational behaviour'.** **NB There may be overlap between information gaps and irrational behaviour as reasons.**	**(6)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–2	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no link between causes and consequences.
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Question Number	Indicative content	Mark
(c) continued	**Evaluation 4** • Counter arguments made to the reasons raised • Significance of the reasons provided • Consideration of whether it is rational to assume that consumers seek to maximise utility in allocating their expenditure • Long run information gaps may narrow and irrational behaviour may reduce e.g. improved price plan information & actions of the regulator	**(4)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/ reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation recognises different viewpoints and/or is critical of the evidence.

Question Number	Indicative content	Mark
(d)	**Knowledge 2, Application 2, Analysis 4** BT profit levels have risen to £3.03 billion • **Higher revenue** due to, e.g.: Higher rental price for landline Price increases of 15% Broadband calls up in price Customers paying a higher price for setting up landline with BT Integration with EE increasing mobile revenues Increase in market share to 35% Inelastic PED subject to monopoly abuse • **Lower costs** Approximately 27% fall in the cost of providing the landline service Economies of scale Fall in fixed costs of providing extensive 'landline' network Dynamic efficiency gains/synergy/patents acquired from merger Fall in variable cost • **Other potential reasons** explained: Exploitation of certain consumer groups Effective use of price discrimination Collusion with other landline providers	

	Costs and revenue diagram showing: Original profit maximising output level Outward shift in AR and MR And/or – fall in AC and MC And/or – fall in AC if FC lower And/or **Changes** shown on Monopoly diagram e.g. from limit pricing to profit maximisation Original SNP and larger new SNP area **NB – For Level 3 an accurate costs and revenue diagram must be included.**	**(8)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–2	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	3–5	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response; chains of reasoning are developed but the answer may lack balance.
Level 3	6–8	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Indicative content	Mark
(d) continued	**Evaluation 4** • Profits levels are likely to fall in the future due to the actions of the regulator and prices falling • Profits levels are likely to fall in the future as more competition enters the markets • Relative significance of points • Significance - both factors are working together to increase the extent of their profits • Not possible to say for certain due to a lack of information and data • Magnitude – 27% fall in costs likely to have a significant contribution.	**(4)**

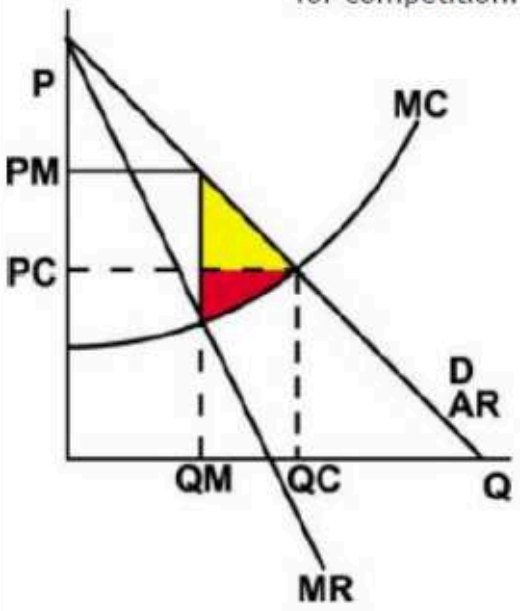
Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation recognises different viewpoints and/or is critical of the evidence.

Question Number	Indicative content	Mark
(e)	**Knowledge 3, Application 3, Analysis 3** **Methods of government intervention include:** • Price regulation • Profit regulation • Renationalisation of industry • Performance targets • Quality standards • Providing information to enable switching • Policies to enhance competition between firms e.g. start-up grants • Policies to improve contestability and help small firms • Work of the Competition & Markets Authority regarding abuse of dominant position, anti-competitive agreements or intervening on mergers. **NB for a Level 3 response there must be reference to the context of utilities. (Do not award Level 3 if no reference to the data provided or utility industries)** **NB for a Level 3 response there must be reference to more than one policy and the policy must refer to how it protects consumers.** **NB for a Level 3 response a diagram is not required but may include for example**	



Consumer surplus increases (A-B)

Improved allocative efficiency for consumers, surrogate for competition.



(9)

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–3	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	4–6	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response; chains of reasoning are developed but the answer may lack balance.
Level 3	7–9	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Indicative content	Mark
(e) continued	**Evaluation 6** • Criticisms of the likely effectiveness of the policies • Awareness of the problems surrounding their implementation • Recognition that a combinations of approaches may be needed • Different industries may need differing approaches • SR v LR implications • Regulatory capture • Asymmetric information • Regulatory lag • Irrational consumer behaviour • Unintended consequences of government failure e.g lack of innovation, price increases, deteriorating customer service. **NB for a Level 3 response there must be reference to the context of utilities.**	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evidence of evaluation of alternative approaches which is unbalanced. Evaluative comments with supporting evidence/reference to context and a partially-developed chain of reasoning.
Level 3	5–6	Evaluative comments supported by relevant chain of reasoning and appropriate reference to context. Evaluation recognises different viewpoints and/or is critical of the evidence.

Q13.

Question Number	Answer	Mark
(a)	**Knowledge 2, Application 2, Analysis 1** **Knowledge and analysis** 3 marks for identifying market structure and relevant features. Points might include: • Monopolistic competition or highly competitive (1) • Many small sellers in the market (1) • Low price setting power (1) • Firms sell differentiated goods (1) • Normal profit/low profit margins as a sign (1) of low barriers to entry/exit (1) • Allow up to 2 marks for diagrammatic analysis **Application:** 2 marks for data (1+1 or 2): point might include: • there are many firms 10 000 to 20 000 (1) • cheap, low skill labour are possibly migrants (1) • low level of capital required (1) • everyone paying the same £5 (1) • some offering inside and out washes (1) / similar car washing at each provider (1) • Availability of cheap premises make market entry easier (1)	**(5)**

Question Number	Answer	Mark
(b)	**Knowledge 2, Application 2, Analysis 2, Evaluation 2** **Knowledge/ implicit understanding:** (1+1) marks for **two** reasons and explanation e.g. • HCWs are inferior goods if demand rises when incomes fall • HCWs at £5 are a very small percentage of consumer income so they might be seen as essential or basic goods • Other factors affect demand apart from income, for e.g. availability and price of substitutes (automatic car washes [might be normal/luxury good] or car washing equipment), working patterns **Application:** (2 marks for any relevant point, or two points 1 +1). Points might include: • Incomes are not keeping up with inflation so real incomes are falling • HCWs at £5 are a very small percentage of consumer income so they might be seen as essential or basic goods. • Increased demand when people have lower incomes – high level of utility at small expense, Extract A paragraph 2 • Extract B: there is a decrease in the availability of automatic car washes as independent petrol retailers go out of business. • Increased number of sites and rents have fallen (Extract A paragraph 3)	

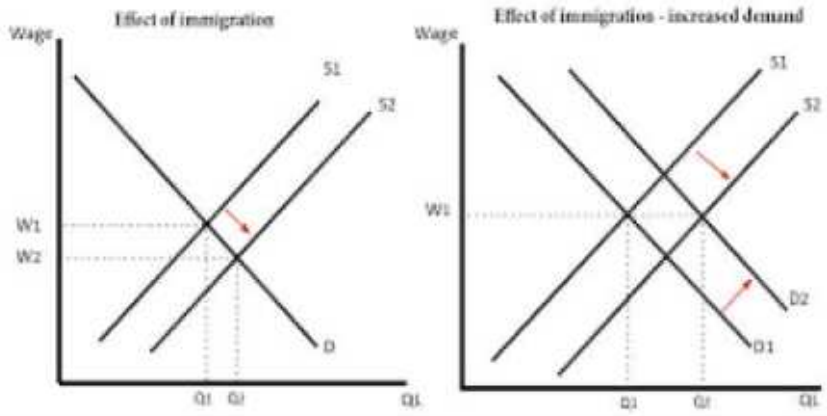
	Analysis (1 + 1): • Linked development of the two points made • Maybe shown by diagrammatic analysis **Evaluation:** (2 marks for any relevant point, two points 1 +1). Points might include: • Subjective happiness is yielded from an HCW, implying that it is rational to use an HCW/it is not rational as washing the car at home is cheaper when incomes fall • Incomes have not been falling over the whole period, so it is more likely that as incomes rise people are buying a HCW as a YED is low (small percentage of income) • Regional or demographic changes in incomes	**(8)**

Question Number	Indicative content	Mark
(c)	**Knowledge 2, Application 2, Analysis 4** **Knowledge/implicit understanding:** Points might include: • Increased labour supply – workers willing to take low-paid jobs • Arguments also allowed that since the UK left the EU, many workers are leaving – question does not specify immigration or emigration • Increased demand from increased UK population also allowed as an approach **Application:** • Immigrants the main employees at HCWs and similar labour intensive firms (Extract A) • Implication in EU that increased immigration (Extract A paragraph 4) has caused supply to increase and therefore wages half of minimum wage (Ext A last paragraph) • HCW often a first job while the migrant's language improves on arrival in the UK (Ext A) • Following UK leaving the EU many low skilled labour may leave • Workers are not able to migrate as wages are not high enough in sector to be able to migrate to post UK leaving the EU	

	Analysis: • Labour market diagram showing increase in the supply of labour • NMW diagram showing excess supply of labour at the wage floor • Allow decrease in supply, e.g. since the UK leaving the EU • Allow backward bending supply of labour • Allow monopsony diagrams (although not required) • Some segments require more skilled workers and not suit low skilled migrant workers, e.g. valeting • Reference to any industry that relies on migrant workers, e.g. hospitality, nursing, construction **NB if no valid diagram or reference to an industry, then award a maximum of Level 2 KAA**	**(8)**

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Diagram, shift in demand and/or supply, or minimum wage e.g.



Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–2	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	3–5	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response; chains of reasoning are developed but the answer may lack balance.
Level 3	6–8	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Indicative content	Mark
(c) continued	**Evaluation 4** • Impact of UK leaving the EU, Global Health Crisis etc. might put immigration figures into negative, and wages and conditions might improve • Depends on monopsony power • Evidence suggests there is not exploitation, or there is not enough evidence • Some firms are charging a fair wage • Other changes in the pipeline • The size of the changes in migration will dictate the impact on labour market • The ability of workers to move to other sectors/ speed language developed will determine impact on labour market • Within HCW there are sub-markets - some specialise in luxury vehicles - others are mobile operators who visit home - each will be affected differently	**(4)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evaluative comments supported by relevant reasoning and appropriate reference to the context. Evaluation recognises different viewpoints and is critical of the evidence provided and/or the assumptions underlying the analysis enabling informed judgements to be made.

Question Number	Indicative content	Mark
(d)	**Knowledge 4, Application 4, Analysis 8, Evaluation 9** 16 marks for KAA, for causes of the number of firms in an industry to change. Microeconomic causes may include: • nationalisation • privatisation • contestability • market power • economies of scale – natural monopoly • regulation and deregulation • oligopoly behaviour • barriers to entry e.g. factors linked to demand- tastes- preference for HCW over automatic, income, availability of substitutes- decline in automatics	
	Macroeconomic causes may include: • economic growth – e.g. a growing market means more firms will enter • trade patterns • level of protectionism • government policies e.g. supply side policies • TNCs and FDI • unemployment (especially given recent events) • inflation- if inflation is high, costs rise and if unable to increase prices, then firms may exit the market • Level of environmental protection- adds to the costs and may reduce the number of firms. • Exchange rates - if appreciated - costs to import lower and export higher - exporters may exit the market • Relative poverty high and rising - more demand low costs HCW increasing demand and market size - more firms **NB for a Level 4 response there must be micro and macro cause(s). Foreign direct investment, role of TNCs, or regulation could be seen micro or macroeconomics** **NB for a Level 4 response there must be reference to an industry**	

	9 marks for evaluation – points might include: • Depends on the nature of the business. Another industry could be used as a contrast, e.g. a capital intensive industry • Depends on the LRAC and the minimum efficient scale in the current situation • Changes over time – barriers to entry or exit are likely to change e.g. in the face of new technology in car wash industry or other industry • Exchange rates go up and down so could equally depreciate • Environmental protection may create more demand as it is a more ethical service and not cause the number of firms to fall	**(25)**

Knowledge, application and analysis		
Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–4	Displays ability to apply knowledge in context but will focus on small range of elements. Demonstrates understanding by identifying relevant information. Demonstrates knowledge and understanding of terms, concepts, theories and models.
Level 2	5–8	Shows ability to apply economic ideas and relate them to economic problems in context. Displays knowledge and understanding of economic principles, concepts and theories to make limited analysis or narrow analysis.
Level 3	9–12	Analysis is clear and coherent with evidence well integrated, although may focus on some of the broad elements of the question more than others. Shows ability to apply economic ideas and relate them directly to the broad elements in the question.
Level 4	13–16	Analysis is relevant, clear and coherent with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems covering both microeconomic and macroeconomic effects. A clear understanding of economic principles, concepts, theories and arguments.

Evaluation		
Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–3	Identification of evaluative comments without explanation.
Level 2	4–6	Evaluative comments with limited explanations. Evidence of evaluation of alternative approaches which is generic or unbalanced leading to limited judgements.
Level 3	7–9	Evaluative comments supported by relevant reasoning and appropriate reference to the context. Evaluation recognises different viewpoints and is critical of the evidence provided and/or the assumptions underlying the analysis enabling informed judgements to be made.

Question Number	Indicative content	Mark
(e)	**Knowledge 4, Application 4, Analysis 8, Evaluation 9** 16 marks for KAA, for effects of increased government intervention. Microeconomic effects may include: • Minimum price, living wage enforced, planning issues, tax, health and safety • Rise in wages (if wage floors introduced) will have a large impact on costs. Might be shown on increasing NMW diagram • Effect on price of car washes – consumer surplus falls, output falls, price increases • Impact on quantity of labour/marginal revenue productivity • Impact on productivity • Diagram to show the effect of the intervention approach, e.g. of minimum price as solution to market failure • Price of a car wash might be passed on to higher wages	

	Macroeconomic effects may include: • Income equality improvements – may use Gini coefficient or Lorenz curve • Prices rise – inflationary effects • reduction in levels of poverty • effects on growth – inflexibility in markets can reduce I or FDI • might improve environmental standards • Reduced employment **NB for a Level 4 response there must be micro and macro effect (s). Employment or welfare issues could be seen as micro or macro, for example, can be used as either micro or macroeconomics** **NB for a Level 4 response there must be reference to an industry**	

	9 marks for evaluation – points might include: • Government failure, e.g. regulatory capture, asymmetric information • depends on impact of other events such as UK leaving the EU, high unemployment from recent Global Health Crisis • effect on workforce of employment regulation depends on elasticity for demand for labour, and degree with which it can be replaced with capital • depends on PED of HCW market as a whole • consumers might also have increases in wages • some firms will face decreased demand and go out of business. Loss of jobs and other economic activity • depends on the PED and PES in factor market and product market as a whole • Wash Mark Certificates not government regulation may have more of an impact in improving quality and conditions for workers and reducing pollution than government action	**(25)**

Knowledge, application and analysis		
Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–4	Displays ability to apply knowledge in context but will focus on small range of elements. Demonstrates understanding by identifying relevant information. Demonstrates knowledge and understanding of terms, concepts, theories and models.
Level 2	5–8	Shows ability to apply economic ideas and relate them to economic problems in context. Displays knowledge and understanding of economic principles, concepts and theories to make limited analysis or narrow analysis.
Level 3	9–12	Analysis is clear and coherent with evidence well integrated, although may focus on some of the broad elements of the question more than others. Shows ability to apply economic ideas and relate them directly to the broad elements in the question.
Level 4	13–16	Analysis is relevant, clear and coherent with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems covering both microeconomic and macroeconomic effects. A clear understanding of economic principles, concepts, theories and arguments.

Evaluation		
Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–3	Identification of evaluative comments without explanation.
Level 2	4–6	Evaluative comments with limited explanations. Evidence of evaluation of alternative approaches which is generic or unbalanced leading to limited judgements.
Level 3	7–9	Evaluative comments supported by relevant reasoning and appropriate reference to the context. Evaluation recognises different viewpoints and is critical of the evidence provided and/or the assumptions underlying the analysis enabling informed judgements to be made.

Q14.

Question Number	Answer	Mark
(a)	**Application 2** **Application 2:** 1 mark for appropriate calculation /formula e.g. $\frac{1.3 \times £489\,000}{100}$ (1) **OR** 489 000 ×0.013 (1) Answer = **£6 357** **Award 2 marks for correct answer (6 360)**	**(2)**

Question Number	Answer	Mark
(b)	**The only correct answer is C** ***A*** *is not correct because the candidate has mistakenly done the average house price in North East of England to the average house price in London* ***B*** *is not correct because the candidate has made a computational error* ***D*** *is not correct because the candidate has made a computational error*	**(1)**

Question Number	Answer	Mark
(c)	**Knowledge 1, Analysis 1** **Knowledge / understanding:** 1 mark for one reason e.g. • differences in average income or wealth (1) • employment or unemployment rates (1) • migration or population change (1) • foreign buyers (1) • availability of land to build on (1) **Analysis**: 1 mark for a linked development e.g. • Higher average income in London mean people are able to obtain larger mortgages and so pay higher prices (1) • Higher employment rate or lower unemployment rate in London mean greater demand for housing from its population (1) • Foreign buyers attracted to invest in London due to high rental returns or expectations of increase in value of property or better market knowledge (1) • Shortage of land to build on in London, especially with green belt restrictions (1)	**(2)**

Q15.

Question Number	Answer	Mark
(a)	**The only correct answer is C** ***A*** *is not correct because* OP_1HQ_1 *is the total cost of the product plus tax revenue producers' share of the tax* ***B*** *is not correct because* P_2P_1HJ *is the consumers' share of the tax* ***D*** *is not correct because* P_3P_2JK *is the producers' share of the tax*	**(1)**

Question Number	Answer	Mark
(b)	**Knowledge 1, Application 1, Analysis 1** **Knowledge/understanding** 1 mark for correct definition of specific tax e.g. specific tax is a set amount per unit of the product sold **Application** 1 mark for e.g. of specific tax such as: • fuel duty • alcohol and tobacco duty • gambling duties • air passenger duty • sugar tax **Analysis** 1 mark for linked development e.g. to internalise the externalities accruing to the consumption of products causing external costs (1). Reference to 'sin taxes' (1). Raising revenue (1).	**(3)**

Questions

Q1.

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

Between 2016 and 2017 the average price of new build houses in the UK rose by an estimated 5.4%.

Year	Quantity of UK new house builds
2016	134 612
2017	162 880

(Source: http://www.telegraph.co.uk/business/2017/05/25/number-new-homes-built-hits-highest-level-since-financial-crisis/)

(a) With reference to the data provided, calculate the price elasticity of supply for new house builds between 2016 and 2017. You are advised to show your workings.

(2)

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(b) A 2.5% increase in new build house prices in one region of the UK causes a 10% increase in the number of houses built. Ceteris paribus, this suggests that supply of new house builds is:

(1)

☒ **A** perfectly price elastic

☒ **B** perfectly price inelastic

☒ **C** relatively price elastic

☒ **D** relatively price inelastic

(c) Explain **one** factor that is likely to determine the price elasticity of supply of new house builds.

(2)

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(Total for question = 5 marks)

Q2.

The table shows the quantity of PlayStation 4 games demanded and supplied.

Price	Quantity demanded per month (000s)	Quantity supplied per month (000s)	New quantity supplied per month (000s)
£25	400	320	
£30	360	360	
£35	320	400	
£40	280	440	
£45	240	480	

As a result of an increase in packaging costs for the games, supply decreased by 80 000 at all prices.

(a) Calculate the change in equilibrium price given the increase in packaging costs.
Use the last column for your workings.

(4)

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(b) PlayStation 4 games and PlayStation 4 consoles have a negative cross-elasticity of demand. This implies that these goods are:

(1)

A complements

B inferior

C normal

D substitutes

Answer

(Total for question = 5 marks)

Q3.

(a) With reference to Figure 1, explain **one** possible cause of the forecast change in total energy use.

(5)

(b) With reference to Figure 4, examine the likely impact on the USA's circular flow of income of the trends in exports and imports of natural gas between 2000 and 2020.

(8)

(c) With reference to the information provided, discuss the likely impact of a change in the price of gas on the markets for solar energy and nuclear energy.

(12)

EITHER

(d) With reference to the information provided and your own knowledge, evaluate the possible microeconomic and macroeconomic effects on the UK economy of a decision by the government to encourage fracking.

(25)

OR

(e) With reference to the information provided and your own knowledge, evaluate the possible microeconomic and macroeconomic effects on the global economy of lower energy prices.

(25)

(Total for question = 50 marks)

Q4.

Turkey – an emerging economy

Figure 1: Turkey's central bank lending rate, percent, 2013–2018

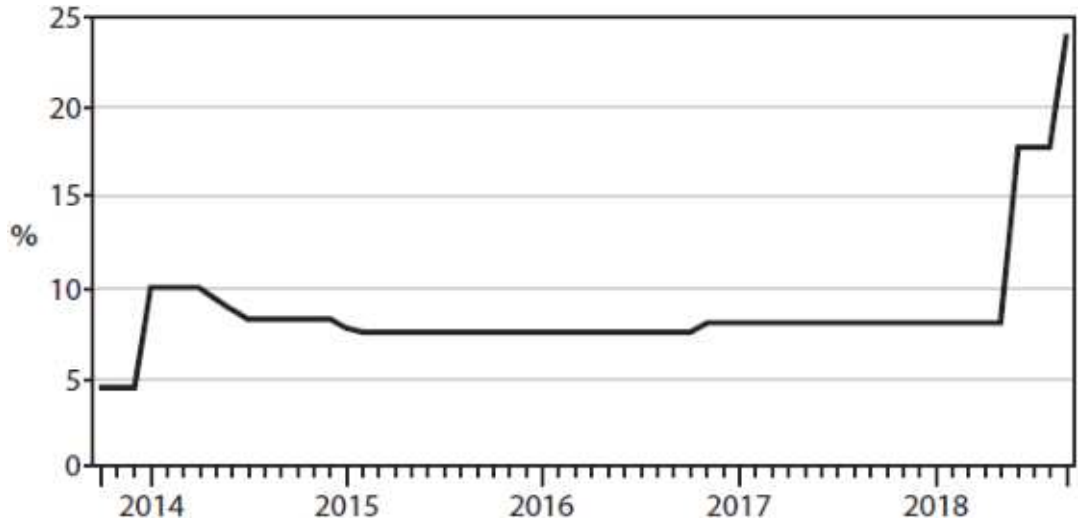
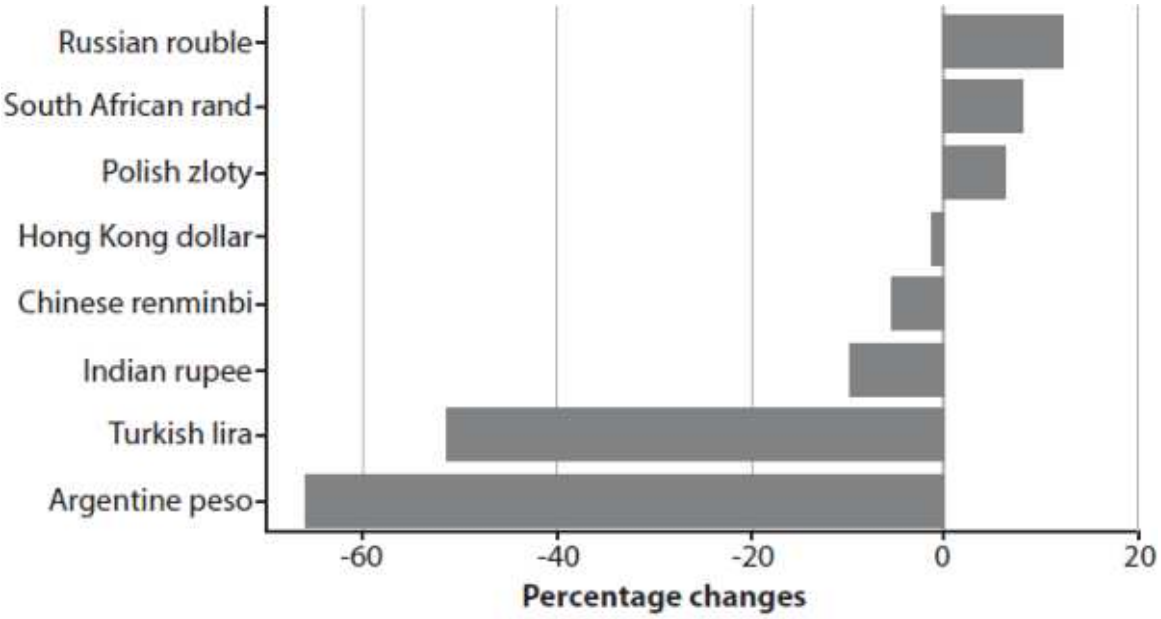


Figure 2: Selected emerging economy exchange rates, percentage change against the US dollar: January 2018 compared to January 2016.



(Source adapted from: FT.com)

Extract A

Can Turkey's central bank avoid another rate rise?

At an annual rate of 25%, Turkey's inflation is alarming. However, it may have peaked. This may be a turning point for the economically struggling country, whose currency (the Turkish lira) has lost nearly a third of its value against the US dollar in 2018. The central bank may be able to avoid tightening monetary policy further, as a severe economic adjustment is already well under way. Turkey is highly indebted in foreign currency. The Turkish government takes measures against excessive appreciation or depreciation of the Turkish lira to reduce financial stability risks. The financial market faces difficulties in trying to restore foreign investors' confidence.

Consumer prices increased by 2.7% in October 2018, a much lower rate than the 6.3% recorded in September 2018. The lira has stabilised, having risen 16% since the central bank raised interest rates by 6.25 percentage points. However, the government wants lower borrowing costs to fuel credit growth and economic expansion. Timothy Ash at a London investment bank says at this point it's "illogical" to raise interest rates again in Turkey. That's because Turkey's economy is already experiencing a severe slowdown.

In the long term Turkey's economic growth is expected to be above that of other emerging markets such as Brazil, Russia and China. Turkey's private sector is resilient. Between 2018–50 we expect Turkey to grow by an annual average of 3.1%. Brazil is expected to grow by an annual average of 2.1%, Russia by 1.6% and China by 2.8%. GDP growth will nevertheless be well below that recorded in 2004–07 and 2010–15. Average growth in GDP per head will be substantially lower, mainly reflecting the expected rise in the total population.

(Source adapted from: https://ftalphaville.ft.com/2018/11/06/1541508141000/Can-Turkey-s-central-bank-avoid-another-rate-hike-/. 6 Nov 2018 Colby Smith and one sentence The president wants lower borrowing costs to fuel credit growth and economic expansion from https://www.theguardian.com/world/2018/aug/07/turkey-urged-to-announce-emergency-interest-rate-hike Larry Elliott 7/8/18 and http://country.eiu.com/article.aspx?articleid=157174199&Country=Turkey&topic=Economy&subtopic=Long-term+outlook&subsubtopic=Summary)

Extract B

Turkey aims to bin the plastic bag

You get a free plastic bag whenever you go to a shop, even if it is just to buy a loaf of bread or a chocolate bar. In Turkey, plastic bags are everywhere, with millions being thrown away, and their use is causing a growing environmental problem.

In Istanbul, the country's biggest city with about 12 million people, around 10000 tonnes of waste are being collected every day. Plastic bags and other plastic waste make up 950 tonnes, or almost 10%, of the total waste.

The Turkish government said it was looking at ways to discourage the consumption of single-use plastic bags. One possible step currently under review is a ban of the black bags that are said to contain carcinogens. Another is that the state may raise taxes on plastic products, which could lead to supermarkets charging consumers for the bags. In Corlu, a town north-west of Istanbul, a local environmental group distributed 20000 canvas bags to shoppers in one month. In some parts of Turkey, plastic bags are completely banned, with heavy fines for both firms and consumers who use them.

(Source adapted from: tseibert@thenational.ae
https://www.thenational.ae/world/europe/turkey-aims-to-bin-the-plastic-bag-1.530059 accessed 11/11/18)

Extract C

Istanbul's third airport set to be the busiest in the world

Istanbul's third airport is being constructed over an area of 76.5 million square metres, to the north of Istanbul. When complete, the new airport will have six runways and have an annual passenger capacity of up to 200 million people, making it potentially the world's busiest airport. "This airport is going to be the most important hub between Asia and Europe," said one business leader.

The airport design includes high vaulted ceilings and spacious, modern and efficient design – and its tulip-shaped air traffic control tower won the 2016 International Architecture Award. It uses mobile applications and artificial intelligence for customers, is energy efficient and has a high-tech security system. The site employs 36000 people and is estimated to cost the equivalent of £10 billion. However, the rush to meet the deadline set by the Turkish government is a major cause of accidents on the construction site, according to the construction workers' union.

(Source adapted from: https://www.lonelyplanet.com/news/2018/08/08/istanbuls-huge-new-airport/ and
https://www.voanews.com/a/istanbul-to-unveil-new-airport-seeks-to-be-world-s-biggest/4632308.html)

(a) Explain how the Turkish central bank intervenes in the currency market to prevent 'excessive appreciation or depreciation of the Turkish lira' (Extract A, lines 7–8).

(5)

(b) Examine **two** reasons why the Turkish government may want to avoid a significant fall in the exchange rate of the Turkish lira.

(8)

(c) Discuss the likely success of policies to reduce the consumption of single-use plastic bags in cities such as Istanbul.

(12)

EITHER

(d) Evaluate the likely microeconomic and macroeconomic effects of a rise in interest rates in Turkey.

(25)

OR

(e) Evaluate the microeconomic and macroeconomic impact of large infrastructure projects such as the building of a third airport in Istanbul.

(25)

(Total for question = 50 marks)

Q5.

(a) With reference to Figure 5 and Extract C, explain **one** likely reason for the fall in the exchange rate of the Turkish lira.

(5)

(b) Discuss the costs to the Argentine economy of an inflation rate "estimated by some economists to be over 25%". (Extract D, line 9)

(12)

(c) With reference to Extract E, examine the impact of restrictions on beef exports on how Argentine farmers decide to use their land.

(8)

EITHER

(d) With reference to the information provided and your own knowledge, evaluate the likely microeconomic and macroeconomic effects of the imposition of 'price controls' (Extract E, line 8) in Argentina.

(25)

OR

(e) With reference to the information provided and your own knowledge, evaluate the likely microeconomic and macroeconomic effects of the 23% devaluation of the Argentine peso.

(25)

(Total for question = 50 marks)

Q6.

The market for cigarettes

Figure 1: Price elasticity of demand - a comparison between tobacco and e-cigarettes

Price of packet of 20 tobacco cigarettes £7.70–£9.50	Price of e-cigarette kit £9.99–£19.99
Average price per tobacco cigarette 48p	Single cigarette equivalent price of an e-cigarette 7p
Price elasticity of demand for tobacco cigarettes –0.35	Price elasticity of demand for e-cigarettes –1.9

(Source: adapted from https://www.blucigs.co.uk/united-kingdom/kits/all-kits)

Extract A

Government intervention on tobacco

There was a time when smoking was fashionable. Television and magazine advertisements glorified smoking. Everyone from your dad to your doctor smoked in all places – cars, restaurants and even hospitals.

Tobacco is still the single biggest cause of cancer in the world and the leading cause of preventable deaths. Nearly 80% of the 1 billion smokers worldwide live in low- and middle-income countries.

Bans on tobacco advertising, promotion and sponsorship can reduce tobacco consumption. Comprehensive smoking bans covering indoor workplaces, public places and public transport have been introduced in 48 countries.

Tobacco taxes are the most cost-effective way to reduce tobacco use, especially among the young and people in low-income groups. A tax increase that raises tobacco prices by 10% decreases tobacco consumption by 4% in high-income countries and 5% in low- and middle-income countries.

However, some 8 million people are expected to die each year by 2030 – because they have smoked tobacco or have been exposed to passive smoking. The use of alternative products such as electronic cigarettes (e-cigarettes) are gaining in popularity but information about their effects is uncertain. Little research has yet been done about the long-term health effects of e-cigarettes and the nicotine dispensed by e-cigarettes is highly addictive. The illegal tobacco market still counts for 1 in every 10 cigarettes consumed globally. In addition, tobacco companies still spend tens of billions of dollars each year on advertising and promoting tobacco products and sponsoring events. They continuously challenge the regulatory measures governments are taking.

(Source: adapted from http://www.who.int/topics/tobacco/en/ and http://www.who.int/mediacentre/commentaries/reducing-tobacco-use/en/)

Extract B

Free market approach

Are free markets incompatible with good health? If the solution to every problem involves banning advertising, raising prices and restricting availability, you might easily conclude that the free market is the disease and government regulation is the cure. From this perspective, the providers of food, alcohol and tobacco are determined to push the most unhealthy products on the public at the lowest prices.

Contrary to this viewpoint, the profit motive is not unhealthy. Businesses have an obvious incentive to keep their customers alive and customers have a strong incentive to seek out healthier options. Any company that can make a scientifically sound health claim gains a competitive advantage over its rivals. Health sells. In contrast, government regulation can lead to negative health outcomes. Markets can correct themselves long before government failures are even acknowledged. Over a million Britons, almost all of whom are smokers or ex-smokers, use e-cigarettes, as a less hazardous product than cigarettes and yet e-cigarettes face increased regulations and in many countries they are banned.

It is neither consistent nor ethical to prevent smokers from switching to much safer alternatives. Efforts to regulate e-cigarettes are a far greater threat to public health than the products themselves.

We argue that the interests of consumers are nearly always better advanced by the provision of accurate information and free choice than by prohibitions and regulations. The government policy of small but steady tax rises on tobacco and ever-larger warning labels is becoming less effective and leads to unintended consequences.

(Source: adapted from http://www.iea.org.uk/blog/free-market-solutions-in-health-should-be-allowed-to-flourish, Christopher Snowdon, 11th July 2013)

(a) Explain why 'bans on tobacco advertising' (Extract A, line 7) may result in a decrease in the revenue of tobacco firms. Include a supply and demand diagram in your answer.

(5)

(b) With reference to the information provided and your own knowledge, assess the view that tobacco consumers switching to e-cigarettes is an example of rational behaviour.

(10)

Tobacco cigarettes and e-cigarettes are considered to be substitutes.

(c) Explain how changes in the price of tobacco cigarettes may affect the demand for e-cigarettes over time.

(6)

(d) With reference to Extract A, lines 11–13, calculate the price elasticity of demand for tobacco cigarettes in high-income countries and in low-middle-income countries. You are advised to show your working.

(4)

(e) With reference to Figure 1, assess the likely reasons for the difference in price elasticity of demand for tobacco cigarettes and e-cigarettes.

(15)

EITHER

(f) Evaluate the possible advantages of a free market approach to cigarette consumption.

(20)

OR

(g) Evaluate the impact of government intervention in the cigarette market.

(20)

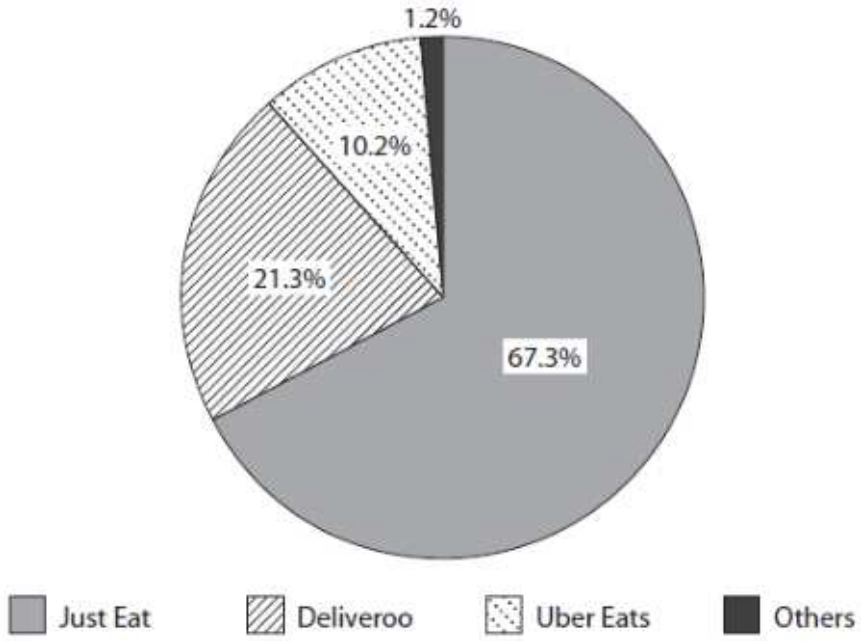
(Total for question = 60 marks)

Q7.

Read Figure 1 and the following extracts (A to C) before answering this question.

The food delivery industry

Figure 1: Market share for third-party food delivery services in the UK, 2019



(Source: adapted from https://onefourzerogroup.com/the-takeaway-takeover/)

Extract A

National Minimum Wage rises are more significant for 23 to 25-year-olds

In 2021, the National Minimum Wage main rate, also known as the National Living Wage, rose by 2.2% to £8.91, following a 6.2% rise in 2020. By reducing the age at which people are eligible for the National Living Wage to 23 in 2021, it is estimated that an additional 7.5% of 23 to 25-year-olds could get a 71p an hour pay rise. This amounts to an 8.7% increase, which may cause further financial worries for employers. 5

(Source: adapted from https://www.ndna.org.uk/NDNA/News/Latest_news/2020/Minimum_wages_to_rise_by_inflation_in_April.aspx)