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EDEXCEL A ECONOMICS: QUESTIONS BY TOPIC

Market Failure (1.3)

A Level Economics Theme 1

58 questions · 563 marks · Mark schemes included

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HOW TO USE THIS BOOKLET

Questions are grouped by specification sub-topic and run from the lowest mark tariff to the highest within each one.

Click any row below to jump straight to that sub-topic or question.

On every question page, click ANSWER in the top-right corner to jump to its mark scheme.

Diagrams, graphs, tables and data are printed exactly as they appeared in the original papers.

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27. Q6(e)	A Level Paper 1 June 2024	15	80
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QUESTIONS

58 questions · 563 marks · 3 sub-topics

SUB-TOPIC 1.3.2

EXTERNALITIES

Sub-topic 1.3.2 · 40 questions · 439 marks · lowest tariff first



2 (a) Define the term 'external benefits'.

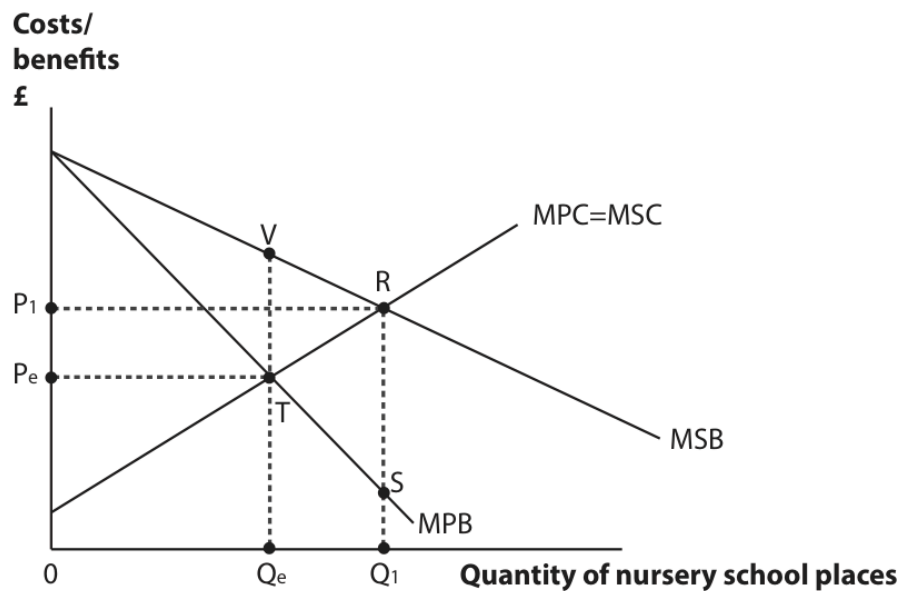
(1)

(Total for Question 2(a) = 1 mark)



Diagram A shows the market for nursery school places.

Diagram A



- (b) Which **one** of the following measures could a government introduce to achieve the social optimum consumption of nursery school places?

It could introduce a:

(1)

- ☐ **A** maximum price of OP_1 per unit
- ☐ **B** subsidy of RS per unit
- ☐ **C** tax of VT per unit
- ☐ **D** minimum price of OP_1 per unit

(Total for Question 2(b) = 1 mark)



- 3** The area around Lake Naivasha in Kenya supplies 70% of the UK cut-rose flower market. Much of the water which the flower farms are dependent on is extracted from the lake. This has resulted in damage to fish stocks and increasing competition for water.

(Source: adapted from 'Flower Struggles', Matthew Wilson, House and Home, Financial Times, 28 February/1 March 2015)

- (a) The impact of the flower industry on workers in the fishing industry is an example of:

(1)

- ☐ **A** private benefits
- ☐ **B** private costs
- ☐ **C** external costs
- ☐ **D** external benefits

(Total for Question 3(a) = 1 mark)



4 A large number of people should be vaccinated against a new virus, so that even those who are not vaccinated will benefit.

(b) Which **one** of the following explains how market failure might occur in a free market economy?

(1)

- ☐ A A net welfare loss results from intervention by the government
- ☐ B Firms enter the market in response to higher prices
- ☐ C Goods with positive externalities are underprovided
- ☐ D Prices rise when there is excess demand

(Total for Question 4(b) = 1 mark)



- 2** The external benefits of higher education include increased tax revenue, faster economic growth, greater innovation and labour market flexibility.

(Source adapted from: <https://www.timeshighereducation.com/news/higher-education-its-good-for-you-and-society/2008681.article#survey-answer>)

- (b) On average, in the UK, a working-age graduate earns approximately £10 000 more per year than a non-graduate.

(Source adapted from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/701720/GLMS_2017.pdf)

This suggests a university degree provides a substantial

(1)

- ☐ **A** external benefit
- ☐ **B** external cost
- ☐ **C** private benefit
- ☐ **D** social cost

(Total for Question 2(b) = 1 mark)



- 3** A company that provides drinking water and treats waste water has been fined £180 000 after an incident that killed about 2 500 fish. The charges relate to an illegal discharge of sewage from the waste water treatment plant that polluted nine kilometres of the River Severn, a popular tourist destination.

(Source: adapted from <https://www.leaderlive.co.uk/news/wrexham/19393552.water-company-fined-today-sewage-leaked-wrexham-river-killing-2-500-fish/>)

(b) Which **one** of the following is the most likely effect of the £180 000 fine?

(1)

To:

- ☐ **A** increase market failure
- ☐ **B** increase profits for the water company
- ☐ **C** reduce external costs
- ☐ **D** reduce government failure

(Total for Question 3(b) = 1 mark)

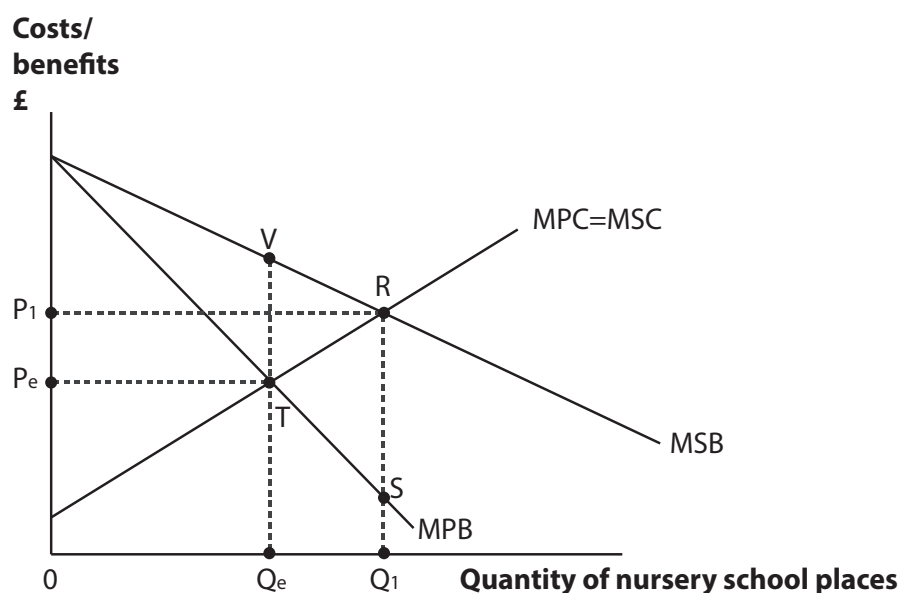


2 (a) Define the term 'external benefits'.

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Diagram A shows the market for nursery school places.

Diagram A



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- ☒ **C** tax of VT per unit
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(c) Annotate on Diagram A the welfare gain area and the new social optimum output resulting from successful government intervention in the market for nursery places.

(2)

(Total for Question 2 = 4 marks)



- 3** The area around Lake Naivasha in Kenya supplies 70% of the UK cut-rose flower market. Much of the water which the flower farms are dependent on is extracted from the lake. This has resulted in damage to fish stocks and increasing competition for water.

(Source: adapted from 'Flower Struggles', Matthew Wilson, House and Home, Financial Times, 28 February/1 March 2015)

- (b) Explain **one** measure the Kenyan government could use to reduce the impact of water extraction from Lake Naivasha.

(3)

(Total for Question 3(b) = 3 marks)

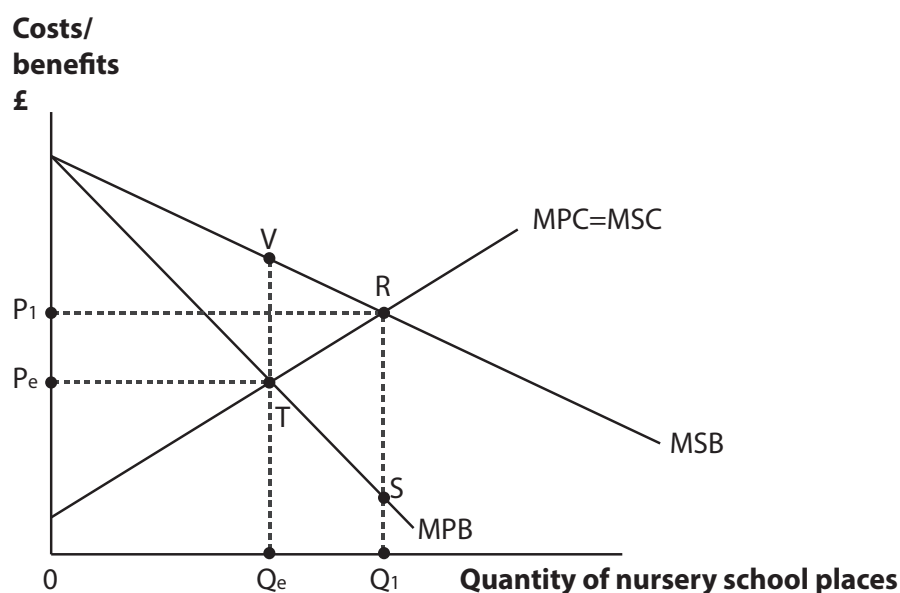


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- ☐ C external costs
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(3)

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(Total for Question 3 = 4 marks)



4 A large number of people should be vaccinated against a new virus, so that even those who are not vaccinated will benefit.

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

(3)

(b) Which **one** of the following explains how market failure might occur in a free market economy?

(1)

- ☒ **A** A net welfare loss results from intervention by the government
- ☐ **B** Firms enter the market in response to higher prices
- ☐ **C** Goods with positive externalities are underprovided
- ☐ **D** Prices rise when there is excess demand

(Total for Question 4 = 4 marks)



- 2** The external benefits of higher education include increased tax revenue, faster economic growth, greater innovation and labour market flexibility.

(Source adapted from: <https://www.timeshighereducation.com/news/higher-education-its-good-for-you-and-society/2008681.article#survey-answer>)

- (a) Draw an externalities diagram to show the likely impact of the consumption of higher education.

(4)



- (b) On average, in the UK, a working-age graduate earns approximately £10 000 more per year than a non-graduate.

(Source adapted from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/701720/GLMS_2017.pdf)

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- 3 A company that provides drinking water and treats waste water has been fined £180 000 after an incident that killed about 2 500 fish. The charges relate to an illegal discharge of sewage from the waste water treatment plant that polluted nine kilometres of the River Severn, a popular tourist destination.

(Source: adapted from <https://www.leaderlive.co.uk/news/wrexham/19393552.water-company-fined-today-sewage-leaked-wrexham-river-killing-2-500-fish/>)

- (a) Draw an externalities diagram to show the likely impact of the sewage discharge on the local tourist industry.

(4)



- (b) Which **one** of the following is the most likely effect of the £180 000 fine?

(1)

To:

- ☐ A increase market failure
- ☐ B increase profits for the water company
- ☐ C reduce external costs
- ☐ D reduce government failure

(Total for Question 3 = 5 marks)

SECTION A

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

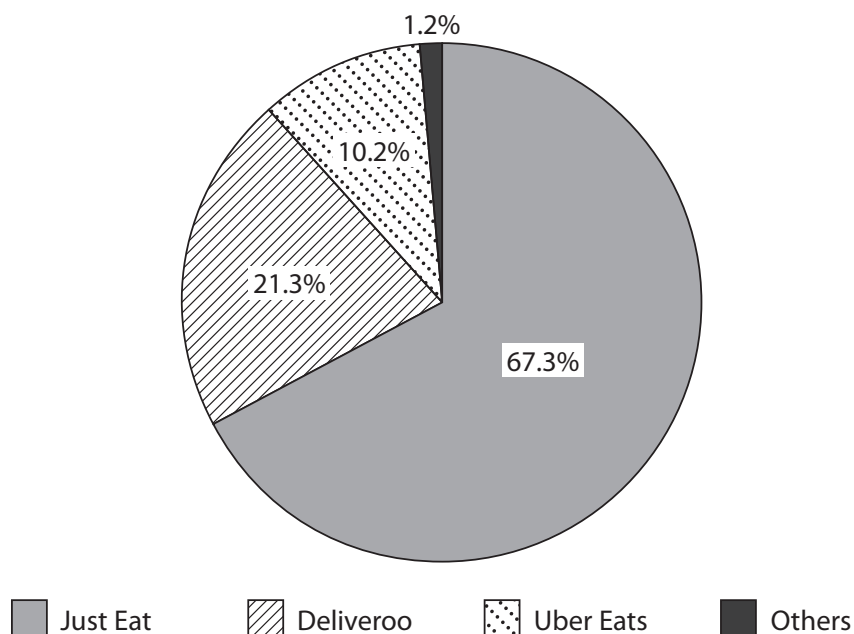
Answer ALL Questions 1(a) to 1(c), and EITHER Question 1(d) OR 1(e).

Write your answers in the spaces provided.

You are advised to spend 1 hour on this section.

Question 1**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)

Extract B**What is the true cost of the food delivery service?**

The food delivery industry has boomed in recent years. Just Eat, Uber Eats and Deliveroo all offer very similar services – third-party food delivery firms that take up to 30% of the price of restaurant meals and deliver them to customers within a certain radius. The average spend per customer is around £15 with a £5 delivery fee, about five times more expensive than cooking at home and the same price as eating in the restaurant. Cash rich, time poor professionals increasingly turn to food delivery. 5

Food delivery comes with many layers of packaging. In the UK, there are 200 million meals annually with around 1.4 billion individual pieces of plastic for heat retention and protection when travelling, but does it really have to be plastic? People tend to order more food, often high in fat, sugar and salt, and don't even have to get up from their sofa. 10

But there are concerns that the delivery firms are exploiting employees who have no alternative. There is an issue of low pay and informal contracts. Delivery drivers are classed as 'independent contractors', and therefore not subject to some employment rights including a guaranteed minimum wage, sick pay, pensions or holiday pay. Drivers are paid either a flat hourly rate, or a fee per delivery. Factors such as delivery distance, speed, how busy it is and whether there are multiple drop-offs are all factored into how much a driver is paid. Deliveroo says its wages amount to around £10 per hour, but drivers say that during 2020 their pay has been as low as £1 per hour. Drivers are not paid extra for petrol or to maintain their vehicles. Many drivers are recent immigrants or students, who do not have property or savings to fall back on. 15 20

The government could address this with widening minimum pay legislation to contracted workers, by setting codes of practice, or by setting recommended wage targets. Furthermore, there are health and safety issues for workers. Vehicle safety checks, length of shifts and safety equipment are of concern. However, there are still people who take benefit from working flexibility. 25

(Source: adapted from <https://www.theguardian.com/australia-news/2020/oct/25/home-food-delivery-what-is-the-most-ethical-way-to-order-in> and https://digitalcommons.molloy.edu/cgi/viewcontent.cgi?article=1043&context=bus_fac)



Extract C**Integration in the third-party food delivery industry**

The Competition and Markets Authority (CMA) is watching carefully to prevent any one firm having complete control of the food delivery industry. Just Eat, the market leader, agreed to merge with successful Dutch firm Takeaway.com in 2020, creating a new European leader by revenues. It also bought Grubhub in the US, with 20 million active users. Just Eat uses an aggressive pricing strategy, undercutting delivery fees below the average cost of other firms in the market, that will force them to merge in order to gain some economies of scale. 5

Amazon, having failed with its own delivery company Amazon Restaurants in 2018, has bought 16% of Deliveroo. The CMA took over a year to agree to the partial integration, on the argument that Deliveroo would close down without external investment. Amazon has unique expertise in marketing, increasing customer share and, most importantly, efficiency in delivering things. Food delivery is often uneconomical because a single household puts in a single order from a single restaurant at any one time. Tech companies such as Amazon can improve the business: once a meal has been ordered, an app often moves that restaurant to the top of the rankings for that neighbourhood, in the hope of getting a second and third delivery. 10 15

So why do restaurants turn to these delivery firms? The sheer volume of customers these delivery firms can hold makes it a difficult deal to turn down. But resentment from small business restaurant owners, angry at being wholly dependent on tech companies, is growing. Most restaurants would prefer that customers come in and pick up their orders themselves because they do not have to pay the 30% commission. Restaurant profit margins are small, and the effects of a 20% fall in the external value of the pound since 2016 on food costs are significant, given that over half of their food and drink is sourced outside the UK. 20 25

(Source: adapted from <https://www.ft.com/content/c20f6848-3c4b-11ea-a01a-bae547046735>
<https://www.ft.com/content/edf8a144-a101-4ef8-80e3-7d2f1565d35c>
 and <https://www.thisismoney.co.uk/money/markets/article-8138703/Uber-set-sell-takeaway-division-rival-Deliveroo-two-years.html> and
<https://www.ft.com/content/c20f6848-3c4b-11ea-a01a-bae547046735> and
<https://www.ft.com/content/bed7c4d8-28c1-11ea-9a4f-963f0ec7e134> and
<https://www.economist.com/1843/2021/01/26/gulp-the-secret-economics-of-food-delivery>)



(5)

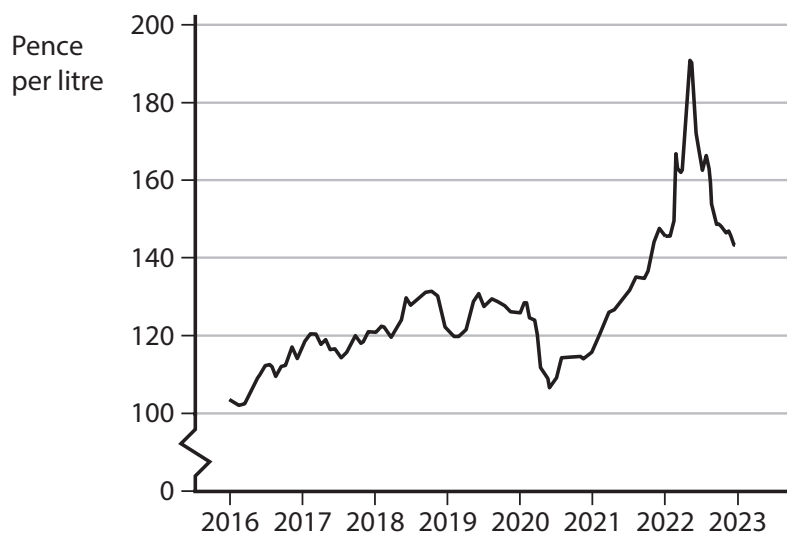


Sources for use with SECTION A

Read Figures 1 and 2 and the following Extracts A, B, C and D before answering Question 1.

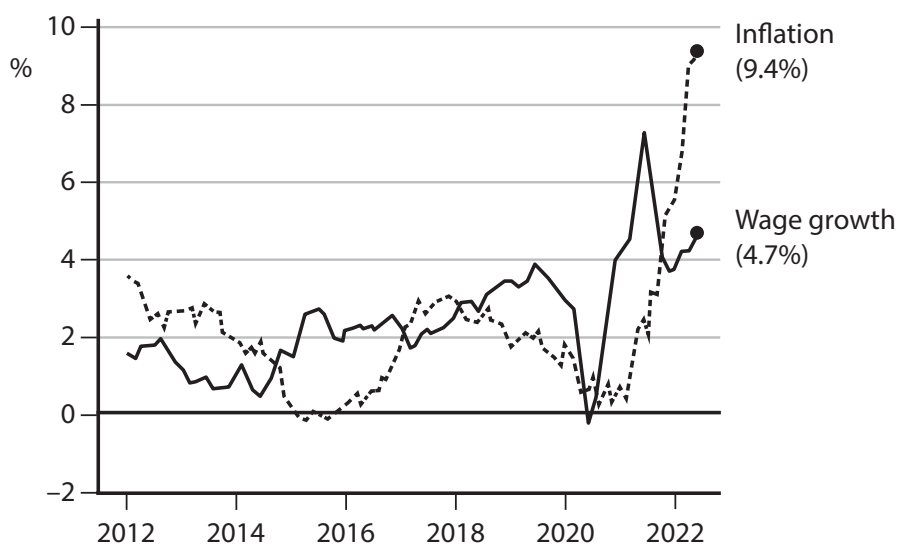
The cost of living in the UK

Figure 1: The price per litre of unleaded petrol in the UK, in pence, 2016–2023



(Source adapted from: RAC)

Figure 2: UK inflation, as measured by CPI, and wage growth (excluding bonuses), 3-month averages, 2012–2022



(Source adapted from: ONS)

Extract A**Supermarket restrictions on multibuy deals and advertising**

Government rules limiting the location of unhealthy foods in shops began in 2022. Less healthy products are no longer promoted in key locations, such as checkouts, store entrances, aisle ends and their online equivalents. Rules banning multibuy deals on foods and drinks high in fat, salt or sugar (HFSS) – including buy one get one free (BOGOF), '3 for 2', and restrictions on free refills for soft drinks – were due in October 2023. The restrictions banning HFSS adverts on TV before 9pm and paid-for adverts online were set for January 2024. 5

(Source adapted from: <https://www.gov.uk/government/news/government-delays-restrictions-on-multibuy-deals-and-advertising-on-tv-and-online>)

Extract B**Supermarket pay in 2023**

Supermarkets have been increasing their hourly pay rates and most now pay significantly more than the National Minimum Wage, which was set at £10.42 in April 2023.

Tesco made its biggest ever investment in employee pay in 2023, spending £230 million to finance an increase in its basic hourly rate of pay, to £11.02 per hour, rising to £11.95 in London. 5

The pay increase is the latest boost in employment benefits as supermarkets continue to compete for in-store workers, with Sainsbury's and Asda both increasing pay to above £11 per hour in July 2023, while Aldi pays £11.40 an hour. 10

Supermarkets have found themselves facing criticism over pay that did not rise in line with inflation. Some workers are taking industrial action, such as strikes, working closely with trade unions.

(Source adapted from: <https://www.grocerygazette.co.uk/2023/02/22/supermarket-pay-rate-2023/>)

Extract C**Supermarket petrol pricing**

In 2023 David Potts, the boss of Morrisons, admitted that supermarkets increased profits at the petrol pumps as he was questioned in a parliamentary committee alongside executives from Tesco, Sainsbury's and Asda who denied they were making more profit from keeping petrol prices high.

5

A Competition and Markets Authority (CMA) report indicates that supermarkets' profits have doubled to 8% on fuel since 2017. It is expected to recommend that supermarkets must share local fuel prices on a comparison website in order to increase transparency and help bring down prices – a strategy tried successfully in Northern Ireland. All the supermarkets said they would welcome such a move.

10

In 2023, the RAC motoring group said that a price checker would be welcome but blamed high prices on the domination of petrol retailing in the UK by a few large supermarkets. "When the wholesale price of diesel fell this spring, we saw average retailer margin reach 22p a litre which was more than three times the long-term margin of 7p. This cannot be allowed to continue when households are having to contend with a cost of living crisis," an RAC spokesperson said.

15

At the committee, one politician, Jane Hunt, said: "In 1978 there were many more supermarkets. Now there are very few...are you in fact a cartel?"

(Source adapted from: <https://www.theguardian.com/business/2023/jun/27/morrisons-boss-admits-supermarket-chains-have-hiked-profits-on-petrol>)

Extract D**EU trade relations with the UK**

The Trade and Cooperation Agreement 2021 between the EU and the UK means that there are no tariffs or quotas on goods moving between the EU and UK, provided those goods meet the 'rules of origin' of a good, based on where the products or materials used in their production come from. They prevent goods manufactured in outside countries being transported through the UK (or the EU) to avoid paying tariffs.

5

To benefit from the zero tariff, businesses must show the origin of their goods. A product qualifies as 'originating' if it is 'wholly obtained' in the UK and EU or has been substantially transformed in one or both markets. That is why UK businesses that re-export goods from outside countries with little or no further processing, may still face tariffs when trading with EU member states.

10

'Rules of origin' can be time consuming and complex. Some businesses cannot or do not wish to claim zero tariff because of the excessive administrative costs to firms.

(Source adapted from: <https://commonslibrary.parliament.uk/new-customs-rules-for-trade-with-the-eu/>)



(5)



SECTION B

Read Figures 1, 2, 3 and the following extracts (A to B) before answering Question 6.

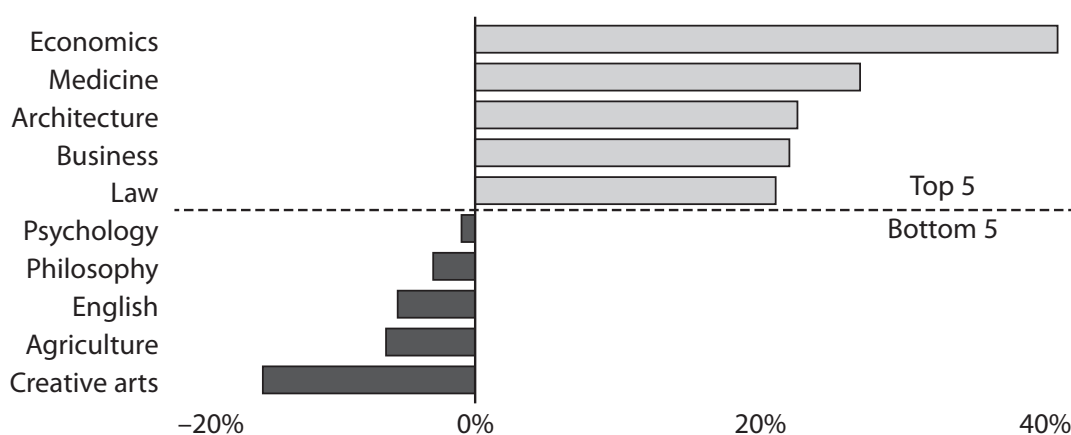
Answer ALL questions 6(a) to 6(e) and EITHER Question 6(f) OR Question 6(g).

You are advised to spend 1 hour and 5 minutes on this section.

Question 6

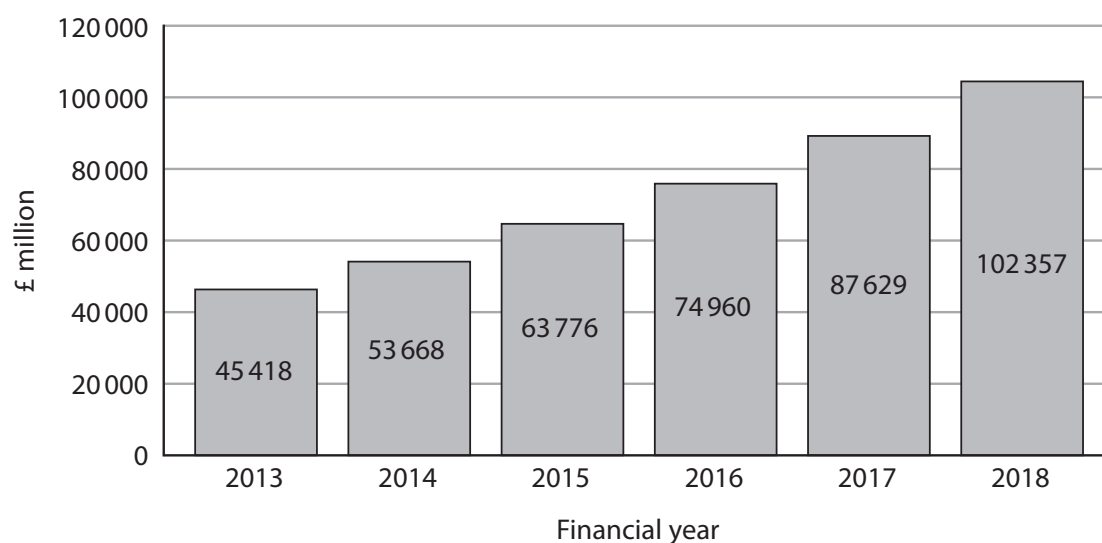
The market for higher education in the UK

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



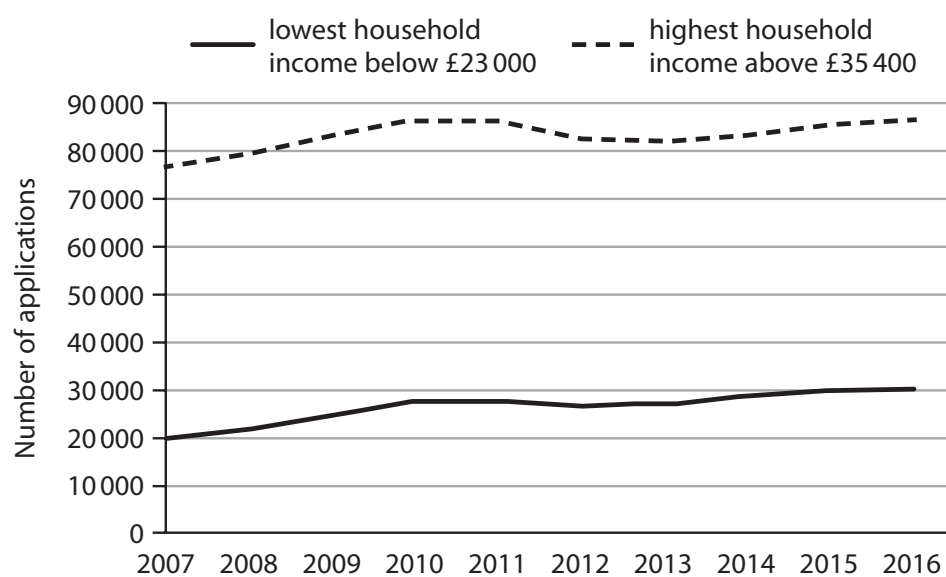
(Source: adapted from <https://www.ifs.org.uk/publications/13731>
The impact of undergraduate degrees on early-career earnings, Research report, November 2018)

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. 5

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. 10

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. 15

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. 20

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. 25

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. 30

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. 35

(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. 5

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. 10

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.' 15

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



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

(6)





SECTION B

Read Figures 1 and 2 and the following extracts (A to C) before answering Question 6.

Answer ALL Questions 6(a) to 6(e) and EITHER Question 6(f) OR Question 6(g).

You are advised to spend 1 hour and 5 minutes on this section.

Question 6

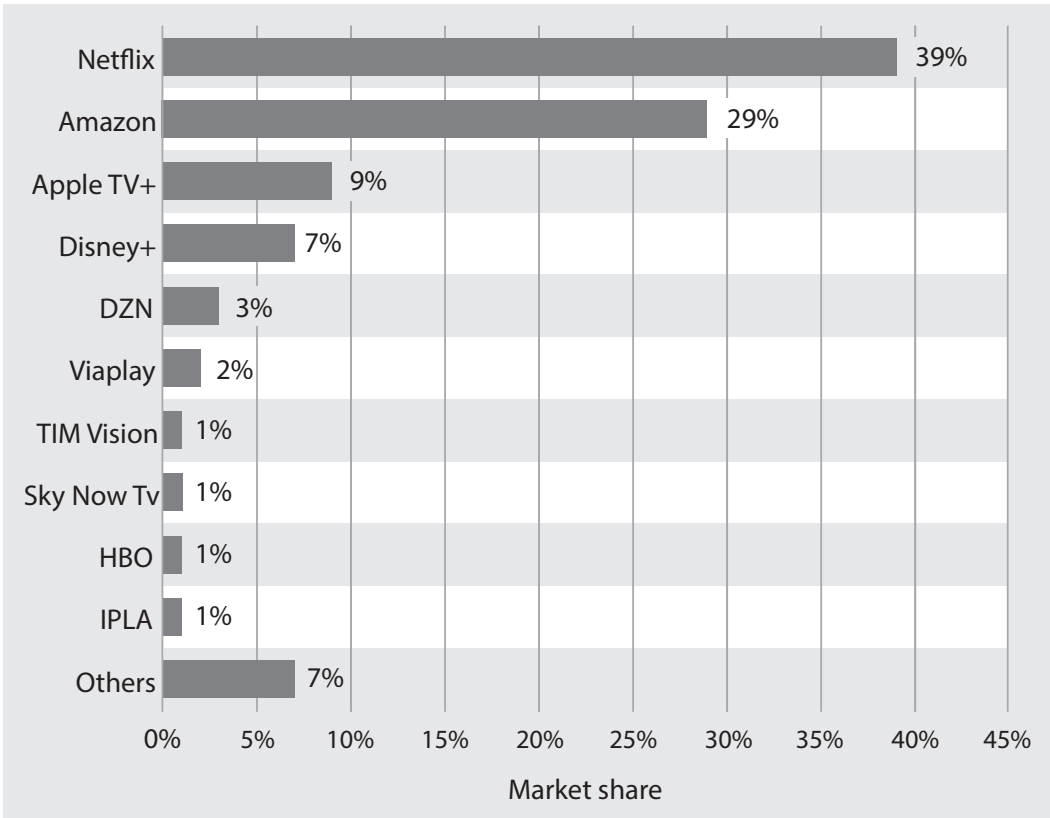
The market for television content

Figure 1: Elasticities of demand for streamed television services, UK, 2021

Price elasticity of demand	−0.6
Income elasticity of demand	1.6

(Source: adapted from <https://www.consultancy.uk/news/24986/covid-19-presents-netflix-with-chance-to-hike-prices>)

Figure 2: Market shares of streamed content providers, Europe, 2021



(Source: adapted from Statista 2021)

Extract A**The growth of streamed television content**

Netflix currently has 13 million UK subscribers, who typically pay £9.99 a month to the US based private sector firm. At this price, up to two users can view the television content at the same time. The demand for individual firms' streamed television content boomed when people were forced to stay at home and has only begun to slow recently as more firms enter the market e.g. Amazon Prime Video. 5

The launch of Disney+ at the end of 2019, including original content such as the £74 million *Star Wars* TV spin-off *The Mandalorian*, resulted in the service adding more UK subscribers in a year in 2020 than any other streaming platform has ever managed.

However, the costs of providing streaming television content have risen. Consumers now expect original content, for example *Stranger Things* which costs around £10 million an episode to make. Furthermore, advertising in a saturated market is expensive. 10

In 2021, Netflix put up the price of its most-popular package by £1 a month to £9.99. Fortunately for Netflix, its subscriber demand has proven price inelastic. Just 3% of customers in a survey said they would definitely cancel their subscription after Netflix's latest price rise. 15

(Source: adapted from 'As UK hits peak, Netflix the streaming giant will have to work harder', The Guardian, Monday 3 January 2022)

Extract B**Is television content a public good?**

Public service broadcasting in the UK is made up of a number of parts. First, there are the main UK-wide public service broadcasters (PSBs). There is the publicly funded BBC, and the publicly owned Channel 4 which is funded through advertisements.

The BBC was established in 1922 by a Royal Charter. It is mainly funded through the TV licence fee, which costs £159 a year and is a compulsory charge for those who watch live TV on any device. Live TV and catch-up services are free to view and do not restrict household usage. Without the licence fee very few people would pay due to the free rider problem. 5

The BBC's Charter sets out its five public purposes: 10

- To provide impartial news and information
- To support learning for people of all ages
- To show the most creative, highest quality and distinctive televised content
- To provide content for minority groups which would not be profitable for a private firm 15
- To reflect the UK, its culture and values to the world.

(Source: adapted from <https://publications.parliament.uk/pa/cm5801/cmselect/cmcomeds/156/15604>, and 'BBC licence fee to be abolished in 2027 and funding frozen', The Guardian, Sunday 16 January 2022)

Extract C**The environmental impact of streaming television content**

The carbon footprint produced by watching a month of Netflix programmes is equivalent to driving a car to Saturn. Every activity in the chain required to stream video, from the use of huge datacentres and transmission over Wi-Fi and broadband to watching the content on a device, requires electricity. The majority of this is generated by emitting CO₂. Modern flatscreen televisions use significant amounts of energy. 5

There's very little a government can do about this in a free market dominated by US firms. The focus of any government intervention could be to encourage alternative forms of entertainment and recreation, support the development of more energy efficient devices, to improve information on the environmental effects or to use regulation to limit viewing hours. 10

(Source: adapted from 'Streaming's dirty secret: how viewing Netflix top 10 creates vast quantity of CO₂', The Guardian, Friday 29 October 2021)



(6)



SECTION A

Read Figures 1 to 3 and the following extracts (A and B) before answering Question 1.

Answer ALL questions 1(a) to 1(c), and EITHER Question 1(d) or 1(e).

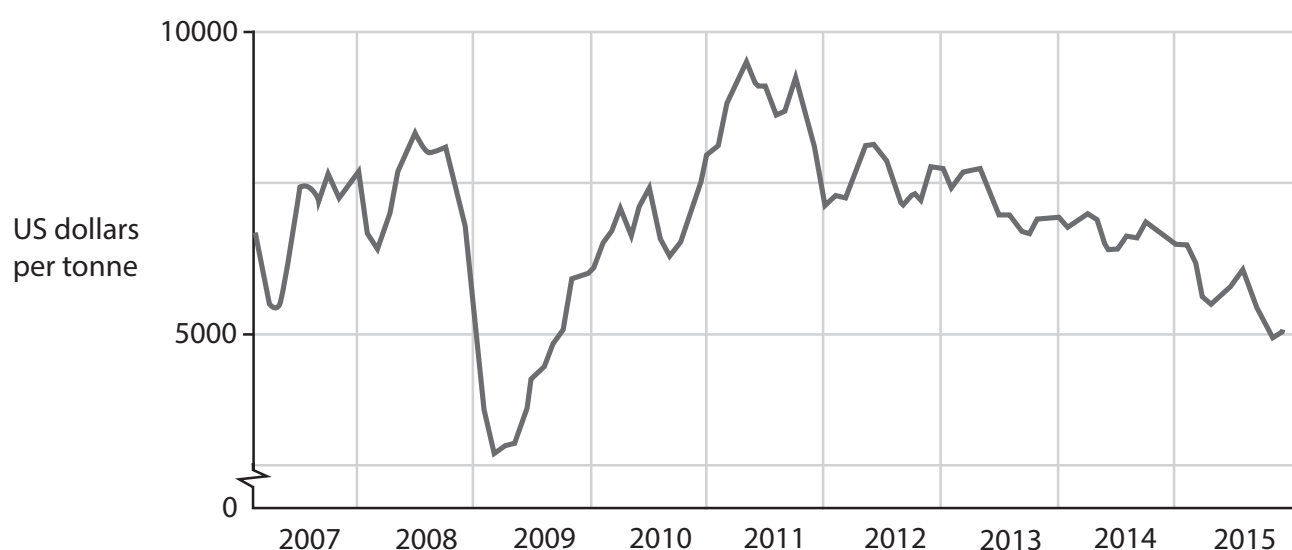
Write your answers in the spaces provided.

You are advised to spend 1 hour on this section.

Question 1

Chile

Figure 1: Copper prices, US dollars per tonne, 2007–2015



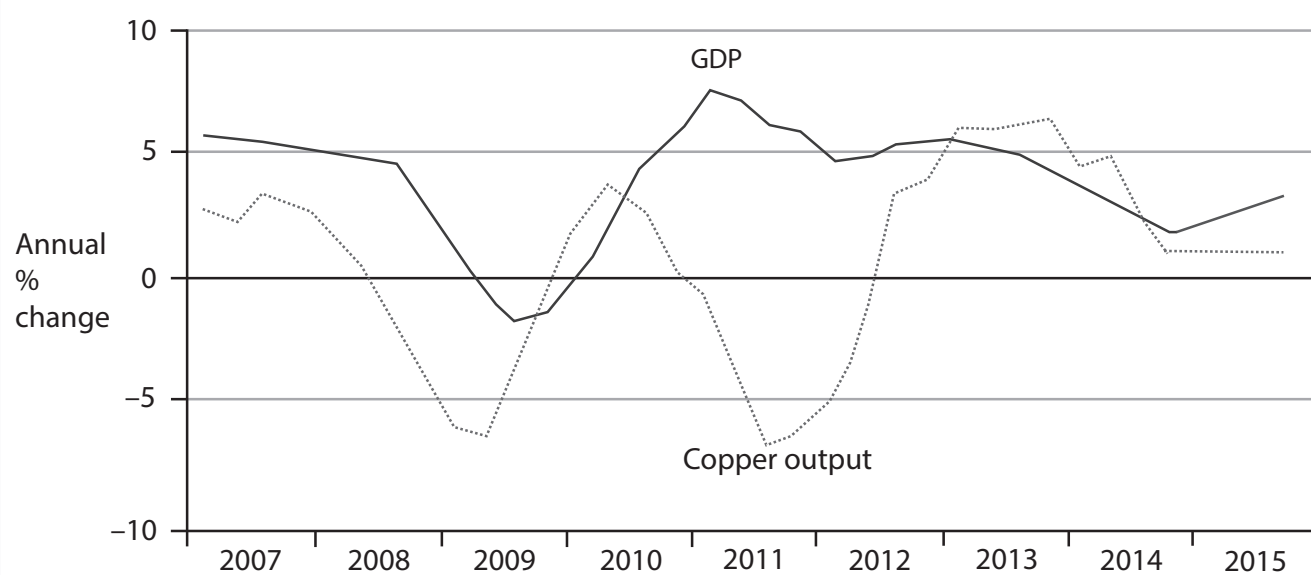
(Source: adapted from <http://www.indexmundi.com/commodities/?commodity=copper&months=120>)

Figure 2: US dollar per 100 Chile pesos exchange rate, 2007–2015



(Source: <https://www.google.co.uk/finance?q=CLPUSD&ei=OGEvVun-AouIU6awjugF>)



Figure 3: Chile: copper output and real GDP growth, 2007–2015

(Source: adapted from FT.com sources below)

Extract A**Chile's economic outlook brightens**

Chile has been hit hard by a worldwide fall in commodity prices since 2011. Copper accounts for 20% of Chile's GDP and 60% of its exports; one third of the world's copper is produced by Chile. China purchased 40% of the world's copper, so a slowdown in China combined with increased global over-supply has meant copper prices have collapsed (see Figure 1). Chilean government income from copper exports had reached \$11.5 billion a year before copper prices fell, but now tax revenues from this source have fallen drastically. Growing numbers of copper mines struggle to break even at current prices. 5

Chile's GDP is now growing, helped by a weak currency that has boosted export industries outside the mining sector, such as its successful wine and salmon industries. There are strengths in tourism and high-tech products. Public services are good in Chile, and poverty rates have been falling fast. On top of this, a large and diversified financial sector with high domestic savings provides a useful safety net, given high levels of corporate debt and the government's need to finance a fiscal deficit of 3% of GDP. 10 15

Chile's economy is often regarded as the best run in the region. This is attributed to the credibility of its financial institutions, relatively low levels of national debt (about 15% of GDP) and its free-trade model, which is unrestricted by government interventionism that has distorted the economies of countries such as Argentina and Venezuela. "Chile is an example of how credible institutions can smooth the economic cycle and make adjustments less traumatic," said Mr Valdés, the minister of finance in Chile, pointing to its widely respected and independent central bank and a well-established fiscal rule that give officials the freedom to implement counter-cyclical policies. 20

However, there are worries that without enough spare capacity in the economy, expansionary fiscal and monetary policies could end up increasing inflation rather than economic growth. Meanwhile monetary policy is restricted by inflation that has reached 5%, well outside the central bank's 2–4% target range, fuelled by a weaker exchange rate. Crucially, investment remains low because of uncertainty over the outcome of the Prime Minister's reforms, which are aimed at reducing inequality. A recent rise in corporation tax from 20% to 25% and labour market reforms that strengthen the power of trade unions may have a negative effect on business confidence. 25 30

Despite a "mildly contractionary" budget, Valdés insisted that the government would continue with costly reforms. Increased taxes on those on higher incomes are considered by the government to be necessary to sustain economic development in Chile. "We do want to change society, while recognising all the good things that have been done in the past 25 years," said Mr Valdés, referring to an average growth rate of 5.3% over the past three decades, but under 2% in 2015. There is broad consensus that investment in education is the key to unlocking Chile's growth potential. 35

(Sources: adapted from <http://www.ft.com/cms/s/0/89926ce8-df96-11e4-a6c400144feab7de.html#axzz3pCnzT3PC> FT 20 April 2015 and <http://www.ft.com/cms/s/0/d60ac2b2-7453-11e5-a129-3fcc4f641d98.html?siteedition=uk#axzz3pCnzT3PC> FT 19 October 2015 and <http://www.ft.com/cms/s/0/d60ac2b2-7453-11e5-a129-3fcc4f641d98.html?siteedition=uk#axzz3pCnzT3PC> FT 19 October 2015 all by Benedict Mander)



Extract B**Chile's copper mining on a downward track**

There was a time when investing in Chilean mining meant guaranteed success. After 1990, when military rule was replaced by an elected government, market reforms and restored relations with the US and UK meant foreign companies were keen to exploit vast copper reserves. The existence of large copper reserves in a stable country with a business-friendly government is rare, making Chile much more attractive to investors than countries such as Zambia. 5

By mid-2015, however, the copper price hit a six-year low. Chilean mines are becoming less productive. After 20 years of heavy digging, the ore is lower grade, and much further down. The deeper pits take longer to mine, and use more fuel. Wages are high, and trade unions are powerful. A mining truck driver earns \$70 000 a year, \$10 000 more than the US equivalent. Many mining projects that were planned are being postponed, and investors are looking to Peru; even the US copper mining industry is becoming more competitive. 10

Energy supply is also a worry as Chile produces virtually no fossil fuels and relies on imported coal and liquid natural gas to power its mines. Energy costs account for 18% of the cost of copper production. 15

Water supply is also becoming a major problem. Farmers and communities accuse mining companies of causing water shortages to keep their operations running. A prolonged drought has not helped. Mining firms are turning to desalination plants or using untreated seawater. However pumping water 200 kilometres from the Pacific Ocean to the copper mines is costly. 20

Chile's environmentalist movement has forced the government to tighten regulations. In 2001, it took 236 days to get an environmental impact assessment of a new mine approved. By 2013, this had increased to 506 days. 25

(Source: adapted from <http://www.ft.com/cms/s/0/ea060ef4-6ae2-11e5-8171-ba1968cf791a.html#axzz3p20if45k> Gideon Long September 27, 2015)



(8)



SECTION A

Read Figures 1 to 3 and the following extracts (A, B and C) before answering Question 1.

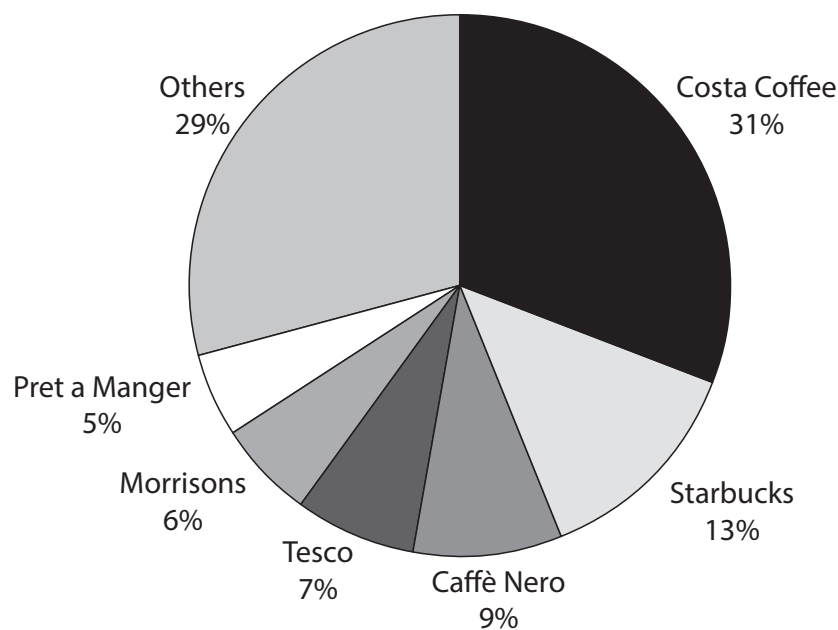
Answer ALL Questions 1(a) to 1(c), and EITHER Question 1(d) OR 1(e).

Write your answers in the spaces provided.

You are advised to spend 1 hour on this section.

Question 1**Branded coffee shops**

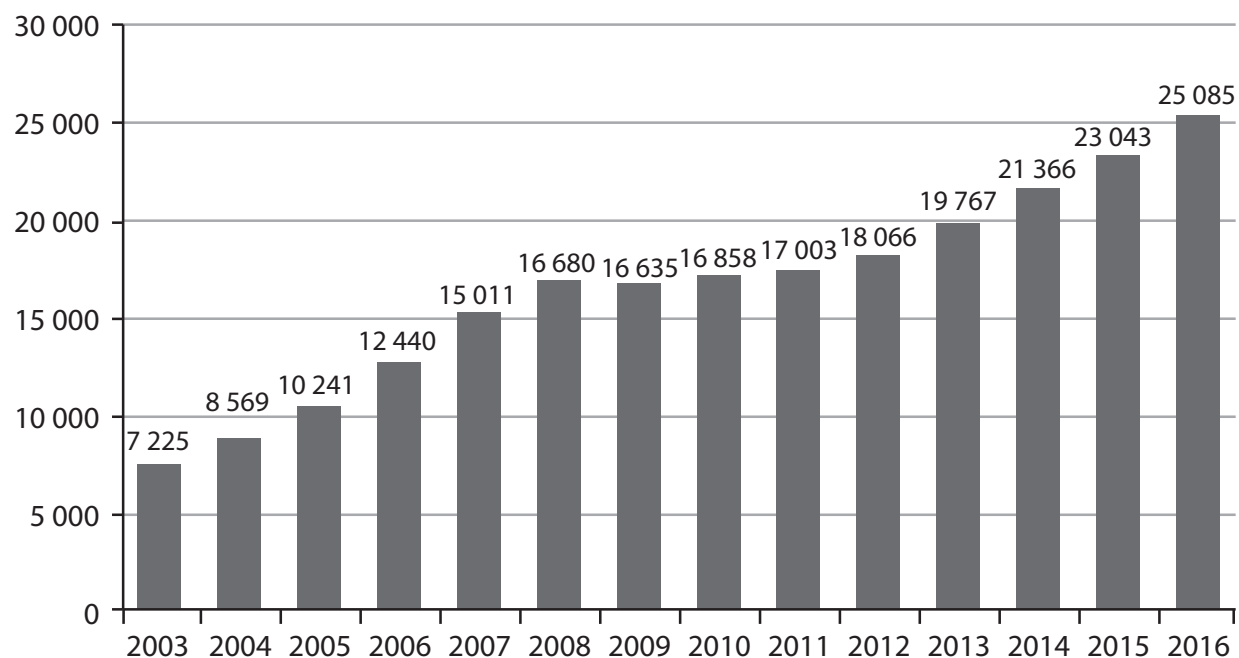
Figure 1: Market share of UK branded coffee shops, 2015, percentages



(Source: <http://metro.co.uk/2015/12/14/the-uks-most-popular-coffee-shop-has-been-revealed-5564569/>)

Figure 2: Number of Starbucks coffee shops worldwide, 2003–2016

Number of
coffee shops



(Source: <https://www.statista.com/statistics/266465/number-of-starbucks-stores-worldwide/>)

Figure 3: Price comparison in selected London coffee retailers, February 2017

Coffee style	Starbucks	Costa Coffee	Caffè Nero	Greggs	McDonald's
Espresso Double	£2.00	£2.00	£1.70	£1.65	£0.99
Latte Medium	£2.60	£2.50	£2.50	£1.80	£1.79
Latte Large	£2.80	£2.70	£2.80	£2.10	£2.09

(Source: data collected from coffee shops in Holborn, London on 25 February 2017)

Extract A**Starbucks in Britain – a loss-making business?**

Coffee shops are among the most profitable parts of the food and drink industry, and few are doing quite as well as Starbucks, a US-based transnational company. Starbucks may be complaining of adverse global market conditions but that did not stop the world's biggest coffee chain from reporting record annual profits in 2016. It made a profit of almost US\$4.2 billion for the year, up 16% on 2015. That was mainly the result of a strong performance in its biggest market, America, where revenue rose 11%. The fastest growth was in the China and Asia Pacific region, with revenue up 23%. Howard Schultz, the CEO of Starbucks, said its Chinese coffee shops were the most efficient and profitable. While Starbucks still makes most of its profit in the US, Mr Schultz has said expansion in China will secure its future for "decades to come" and announced plans to more than double the number of shops in China to 5 000 by 2021.

However its British subsidiary, at first glance, appears to be doing less well. It has announced its first ever profit in Britain in 2015 – of just £1 million – despite opening its first coffee shop in the UK in 1998. It now has 849 UK outlets. The main reason why Starbucks has reported persistent losses in the UK is not due to a lack of demand for its coffee, but to minimise its tax bill. It is claimed that some of Starbucks' revenue earned in the UK is transferred to its Dutch subsidiary, which is charged lower rates of tax.

Starbucks is not finding life as easy in Britain as in the USA. It faces competition from home-grown chains such as Costa and Caffè Nero. Accusations of tax avoidance have also damaged Starbucks' sales to the benefit of its competitors. A survey found that a third less people rated Starbucks as their preferred coffee shop than they did before the tax-avoidance allegations were first published.

These issues have forced Starbucks to change its strategy. It has slowed down its expansion plans in the UK and has closed 67 underperforming coffee shops over the past year. It has also tried to repair its reputation by transferring its European headquarters from Amsterdam to London.

(Sources: adapted from *The Economist* 14 February 2015 <http://www.economist.com/news/business-and-finance/21643271-tax> and Starbucks company report 2016 and http://s21.q4cdn.com/369030626/files/doc_financials/2015/Starbucks-Fiscal-2015_Financial-Highlights.pdf)

Extract B**Tax on disposable coffee cups?**

Two and a half billion disposable cups are thrown away every year in the UK, that is, seven million every day. Only one in 400 is recycled. The UK Environment Minister has suggested that a coffee cup tax could work in a similar manner to the plastic bag charge. The 5 pence a bag charge has led to an 85% reduction in the number of bags being given out since October 2015. It is estimated that introducing a tax on disposable coffee cups would cut usage by two billion every year. One environment spokesperson, Kate Parminter, said: "We've seen how dramatically a small charge has affected public behaviour when it comes to the plastic bags and it is clearly time to extend it to coffee cups. Most people purchase a tea or coffee and throw away the cup without even thinking about it, but a charge would increase our awareness of the environmental impact."

In response, another MP welcomed her comments but said he did not believe a tax was the solution. He said: "My initial reaction is charging 5p or 10p for the cup will not work. It will not encourage people to take their own cups in if a coffee goes up from £2.60 to £2.65. I suspect a more technological answer is what we need – either the composition of the disposable cups being changed so they're more easily recyclable, or changing the technology in the recycling."

Disposable coffee cups contain a plastic coating inside the cups which prevent them from becoming soggy, making them difficult to recycle. There are just two specialist facilities in the UK that have the required equipment to separate plastic from paper for recycling. Almost no recycled paper is used in the production of disposable cups, meaning that some 43 000 trees must be cut down annually to keep up with the demand. CO₂ emissions of around 83 000 tonnes are generated every year for their production.

(Sources: adapted from <http://www.independent.co.uk/news/uk/politics/disposable-coffee-cups-could-be-taxed-like-plastic-bags-environment-minister-says-a6938126.html> 05/09/16 and <https://www.cchdaily.co.uk/lib-dems-call-5p-plastic-bag-tax-coffee-cups>)

Extract C**German city of Freiburg takes action on cutting the use of disposable coffee cups**

The 'Freiburg cup', made from dishwasher-proof plastic, can be reused hundreds of times. Cups are issued with a one-euro deposit, and can be returned to any of the participating coffee shops in the German city. The cups, which are provided to coffee shops by local councils, are washed in the cafés and bakeries that have signed up to the scheme before being reused. 56 coffee retailers have signed up, and 10 000 cups are being used.

One of the main obstacles facing a wider-reaching scheme, however, is the number of café chains in Germany that are unwilling to use unbranded multi-use cups, particularly Starbucks and McDonald's. Starbucks already offers a discounted coffee for customers with a multi-use cup, but only if it is bearing the unmistakable Starbucks logo.

(Source: adapted from <http://www.dw.com/en/germanys-love-for-coffee-to-go-leaves-environmental-groups-demanding-action/a-36689719>)



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SECTION B

Read Figures 1 and 2 and the following extracts (A to C) before answering Question 6.

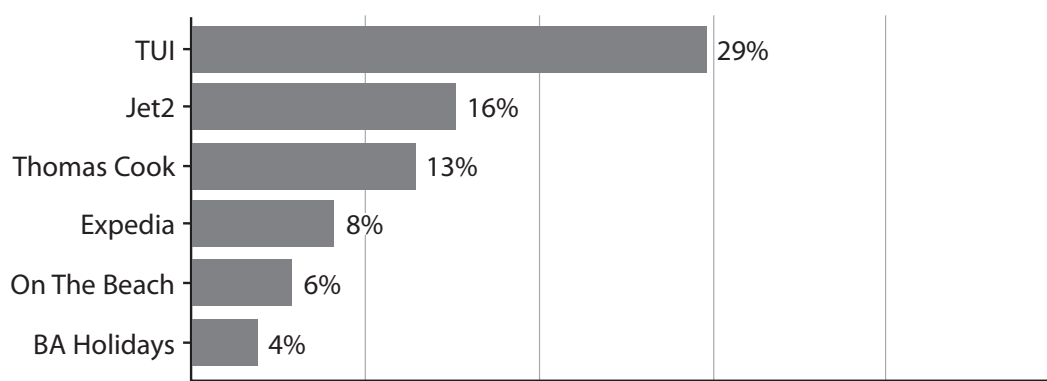
Write your answers in the spaces provided.

You are advised to spend 1 hour on this section.

Question 6

The travel and tourism industry

Figure 1: Package holiday market share of the six largest providers, booked by UK residents, 2019



(Source adapted from: <https://knowledge.sharescope.co.uk/2019/10/16/finding-companies-that-control-their-own-destinies/The Times/ATOL>)

Figure 2: Jet2 package holiday prices to Sorrento

Price before Thomas Cook shutdown

2 Adults for 7 Nights from Monday 25 May 2020

- Half Board
- 1 x Premium Double or Twin room
- Return flights from Edinburgh
[View flight times](#)
- 22 kg Bag Allowance
- 10 kg Hand Baggage
- ATOL Protected
- Coach Transfers

Holiday price from **£1,576** Per person price

£788

Price 12 hours after Thomas Cook shutdown

2 Adults for 7 Nights from Monday 25 May 2020

- Half Board
- 1 x Premium Double or Twin room
- Return flights from Edinburgh
[View flight times](#)
- 22 kg Bag Allowance
- 10 kg Hand Baggage
- ATOL Protected
- Coach Transfers

Holiday price from **£1,648** Per person price

£824

Data accessed: 22nd and 23rd September 2019



Extract A**Marginal productivity of cabin crew**

Cabin crew are responsible for loading passengers and providing in-flight meals. United Airlines is planning to reduce the number of its cabin crew members onboard international flights. The airline currently operates its planes with one more cabin crew member than its competitors. The marginal productivity of this additional crew member may be low. By reducing the number of its cabin crew members United Airlines will be able to operate more efficiently and compete more effectively.

5

(Source adapted from: <https://simpleflying.com/united-airlines-to-reduce-number-of-crew-on-international-flights/>)

Extract B**Thomas Cook's environmental impact**

Thomas Cook Group plc's operations included its airline and 560 high street travel agents providing flights, hotels and package holidays.

The environmental impact of the travel industry is significant. It accounts for 8% of all global carbon emissions. Thomas Cook recognised the risks presented by climate change and actively engaged in reducing their airline emissions. Its plans included using more efficient aircraft and using lower-carbon fuel. In 2018, Thomas Cook was included in the top 10 of the world's most fuel-efficient airlines.

5

(Source adapted from: https://www.thomascookgroup.com/investors/insight_external_assesst/Thomas+Cook+Sustainability+Report+2018.pdf)

Extract C**Why did Thomas Cook shut down?**

Thomas Cook Group plc ceased trading on 23 September 2019. The collapse of Thomas Cook left 600 000 travellers stranded overseas and approximately 21 000 worldwide employees were left without a job.

Thomas Cook's management said that the failure of rescue talks between banks, shareholders and the UK Government meant it had no choice but to shut down the business. 5

But in truth the tour operator's problems go back much further. A disastrous merger in 2007, increased debts, the internet revolution in holiday booking and Brexit uncertainty all contributed to the failure of the business. 10

In 2007 it merged with MyTravel. Thomas Cook directors had an objective of rapid company growth over short-term profitability. The merger was supposed to create a European giant, promising £75 million-a-year cost savings and a springboard to challenge emerging internet rivals. In reality, Thomas Cook was merging with a company that had only made a profit once in the previous six years, and the deal left the Group with huge debts. In May 2019, the firm reported a £1.5 billion loss. 15

The role of the management in Thomas Cook's collapse is being investigated by the UK Government. Thomas Cook executives' salaries and bonuses have been questioned. Directors received salaries totalling £20 million in the five years before its collapse. The Chief Executive Officer (CEO) earned a £500 000 cash bonus in 2017 and about £8.5 million in his five years with the company. It seems that around £4 million of this was in the form of shares. The share price reached £1.46 in 2018, but each share is now worthless. 20

The CEO said that the directors had worked "exhaustively" to rescue Thomas Cook and create a long-term turnaround strategy. "It is a matter of profound regret to me and the rest of the board that we were not successful." 25

The UK prime minister admitted that the government refused to grant £150 million as a subsidy to help rescue Thomas Cook in the short run. The UK prime minister stated: "Clearly, that is a lot of taxpayers' money and sets up, as people will appreciate, a moral hazard in the case of future such commercial difficulties that companies face. I have questions about whether it's right that the directors, or whoever, the board, should pay themselves large sums when businesses can go down the tubes like that. One is driven to reflect on whether the directors of these companies are properly incentivised to sort such matters out". 30

(Source adapted from: <https://www.theguardian.com/business/2019/sep/23/thomas-cook-as-the-world-turned-the-sun-ceased-to-shine-on-venerable-tour-operator>

and <https://www.ft.com/content/a7dd2554-de23-11e9-b112-9624ec9edc59>)

(8)



[illegible]

SECTION A

Read Figures 1 and 2 and the following extracts (A to C) before answering Question 1.

Answer ALL Questions 1(a) to 1(c), and EITHER Question 1(d) OR 1(e).

Write your answers in the spaces provided.

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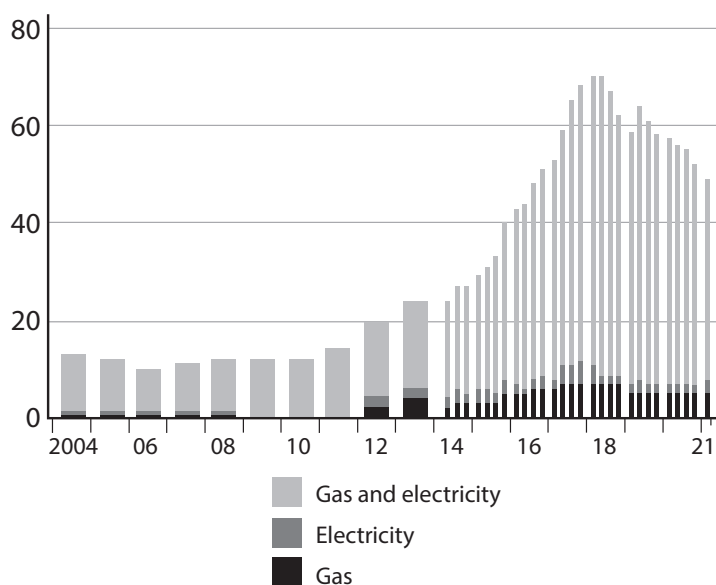
Question 1

The energy market

Figure 1: UK wholesale gas prices per therm, 2021, in pence



Figure 2: Number of firms supplying gas and electricity in the UK, 2004–2021



Extract A**Rising gas prices**

UK consumers are some of the biggest users of gas. 85% of homes use gas central heating, and gas generates a third of the country's electricity. North Sea gas is running out – and as Britain has replaced coal-fired energy production with wind power in order to reduce carbon emissions, it has become dependent on gas imports.

5

Almost all UK businesses face significant rises in fuel costs over the next few months, and there is no substitute for energy, at least in the short run – an almost perfect example of price inelastic demand.

(Source: adapted from <https://www.theecoexperts.co.uk/blog/reasons-for-uk-gas-price-increase>)

Extract B**The UK gas market is broken**

During the past decade the government has allowed new entrants into the retail energy market with business models that left them ill-prepared to achieve long term business growth. Now the UK must choose between letting its energy market collapse and offering large subsidies for energy retailers.

5

The problem began in the 1980s and 1990s, when privatisation created an oligopolistic energy market dominated by the “Big Six”, which paid their shareholders high dividends and their bosses excessive salaries. The government responded to anger over high energy bills with further liberalisation. Some of the new entrants were innovative, such as Bulb, which offered consumption-tracking apps, and Octopus, which discouraged consumption when demand was high with dynamic pricing. But most were under-capitalised and produced no energy, merely buying it on global wholesale markets and selling it on. Some paid little attention to ensuring continuity of supply or forward buying of gas.

10

The constraints on energy retailers worsened in 2017 with the closure of a big gas-storage facility, which left the UK able to store just 2% of its annual demand. Other big gas importing countries, by contrast, can store 20%–30%. The risks rose further in 2019, when the government capped consumer prices in response to continued complaints about high energy bills.

15

The perfect storm came in the summer of 2021. As economies opened up, global demand for energy rose. Gas supply in Russia, a big producer, was disrupted, and unusually calm weather reduced UK wind turbine energy production to 11% of capacity. In August Ofgem, the industry regulator, said that from October the firms would be able to raise prices for households by 54%. But since then the wholesale price of gas paid by UK energy firms has risen by more than 70%. The result is that UK energy firms are tied into contracts to supply gas to households at far less than they must pay to get it.

20

25

(Source: adapted from <https://www.economist.com/britain/britains-gas-market-is-broken/>)

Extract C

The gender pay gap in the oil and gas industry

Despite best efforts to try to attract more women into the oil and gas industry, females are still hugely under-represented in science, technology, engineering and maths careers, whether school leavers, graduates or experienced workers. Women hold under 25% of careers in these areas, and typically hold more non-technical roles, which can attract lower salaries than technical disciplines.

5

There is an even smaller female representation in the offshore workforce (3.6%) e.g. working on rigs in the North Sea, an area that pays higher salaries than onshore work. Despite continued efforts there is still a lack of female applications. Only 5% of the applications to the technical apprentice programme were female, of which half withdrew their applications at the first stage of the recruitment process.

10

There is also a low representation of females in senior leadership roles within the oil and gas industry, especially in technical positions. Women also generally take up part-time positions which are typically lower paid. This has resulted in the oil and gas industry having an average gap in hourly pay of 25%.

15

In the majority of developed countries, women have made substantial progress in the labour market since the 1970s, with both wages and labour force participation increasing relative to that for men. Notwithstanding these large improvements, women still earn less than 'comparable' men in all developed countries and, since the 2000s, progress for women in the labour market seems to have slowed.

20

(Source: adapted from <https://www.harbourenergy.com/media/2a2nmavb/chr-18311-01-gender-pay-gap-2020-v6-final.pdf> and <https://ftp.iza.org/dp10975.pdf>)



(8)





SECTION B

Read Figures 1, 2, 3 and the following extracts (A to B) before answering Question 6.

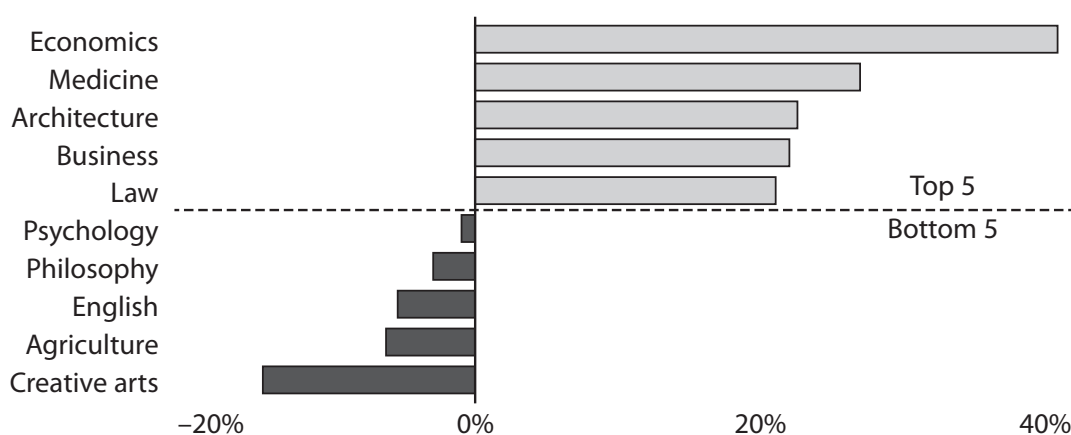
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Question 6

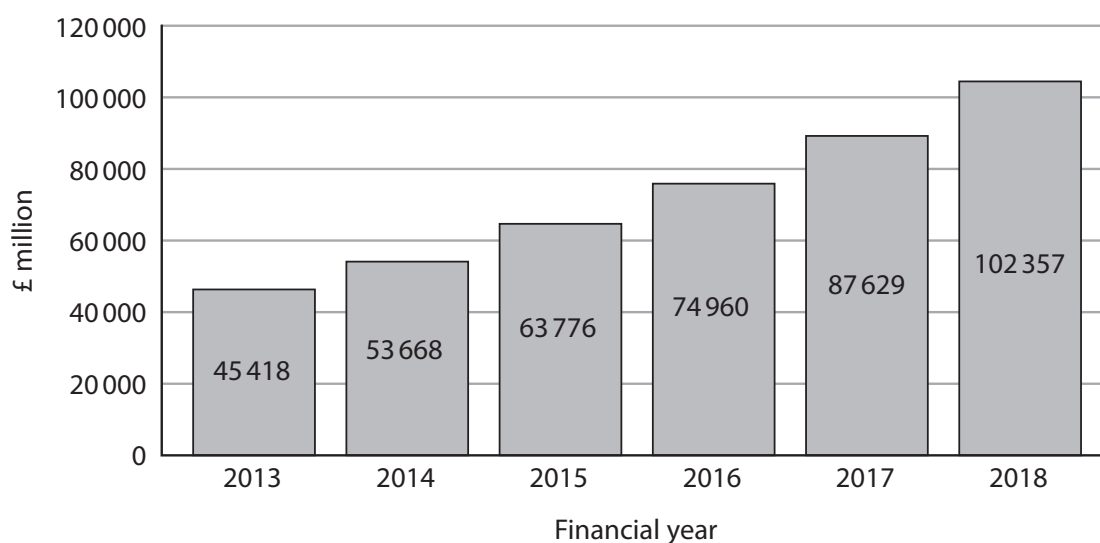
The market for higher education in the UK

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)

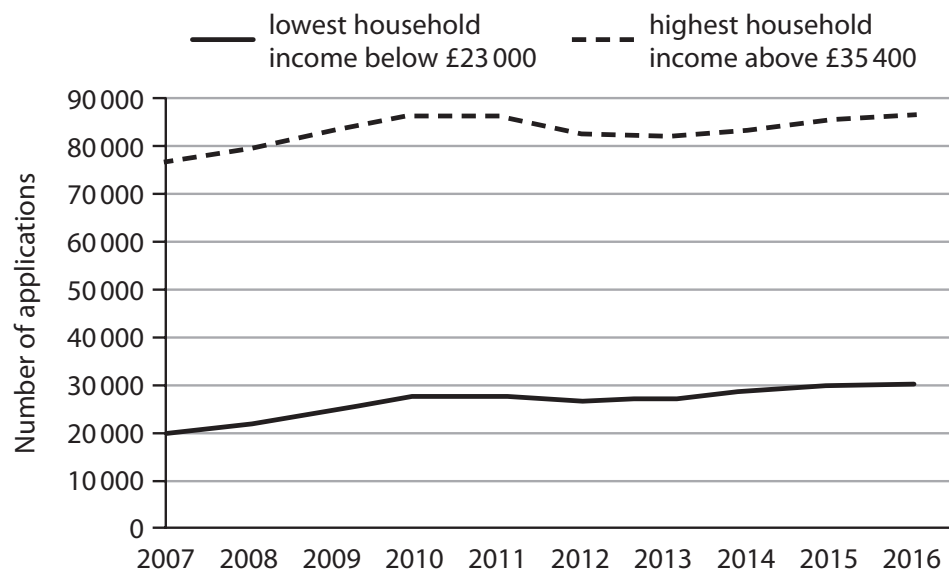
Figure 2: Student loans outstanding at the end of financial years 2013 to 2018 in England



(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. 5

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. 10

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. 15

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. 20

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. 25

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. 30

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. 35

(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. 5

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. 10

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.' 15

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

(10)





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SECTION A

Read Figures 1 and 2 and the following extracts (A, B and C) before answering Question 1.

Answer ALL Questions 1(a) to 1(c), and EITHER Question 1(d) OR 1(e).

Write your answers in the spaces provided.

You are advised to spend 1 hour on this section.

Question 1

Turkey – an emerging economy

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

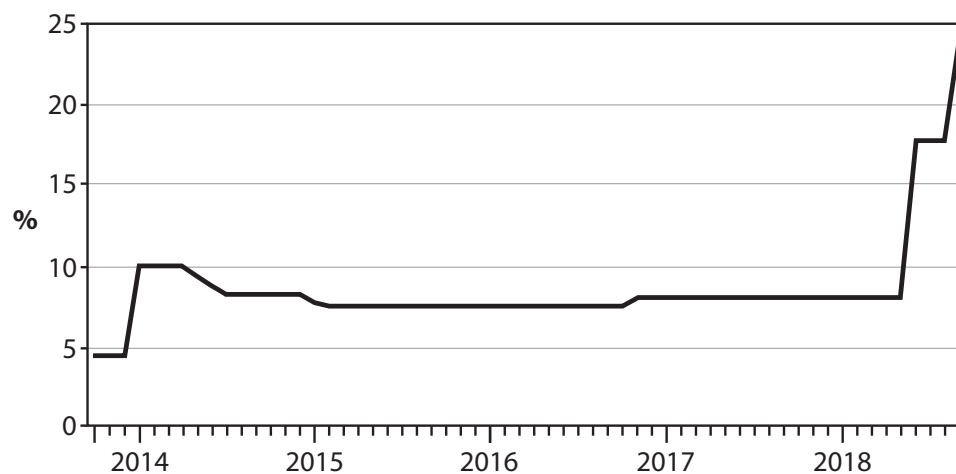
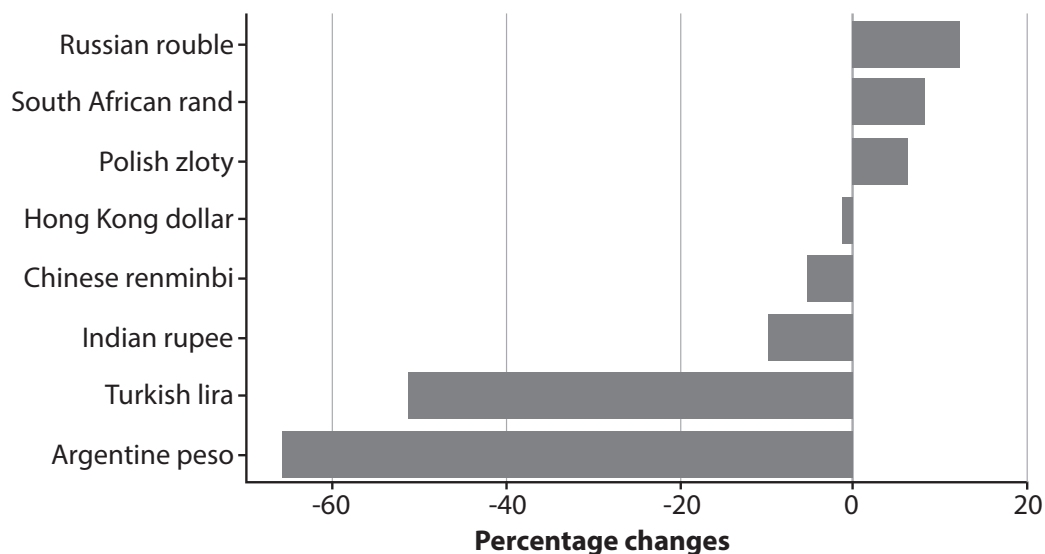


Figure 2: Selected emerging economy exchange rates, percentage change against the US dollar: January 2018 compared to January 2016.



(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. 5

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. 10 15

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. 20

(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 10 000 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. 5

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 20 000 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. 10

(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. 5

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 36 000 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. 10

(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>)





This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

SECTION B

Read Figures 1 and 2 and the following extracts (A to C) before answering Question 6.

Write your answers in the spaces provided.

You are advised to spend 1 hour on this section.

Question 6

The UK online streaming services market

Figure 1: Market share of UK online streaming services

	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022
Amazon Prime Video	37.9%	41.1%	45.0%	27.1%	25.9%
Disney+	16.0%	17.7%	19.3%	14.1%	21.5%
Netflix	15.0%	10.5%	5.0%	9.4%	4.5%
NOW	11.3%	11.2%	5.6%	11.0%	11.1%
AppleTV+	4.0%	5.5%	7.3%	9.2%	9.9%
BritBox	4.0%	3.0%	5.7%	6.0%	5.9%
Others	11.8	11.0%	12.1%	23.2%	21.2%

(Source adapted from: Kantar, Worldpanel Division Geotech 2022)

Figure 2: UK online streaming services – monthly fees

Streaming service provider	September 2022
Netflix premium (4 users/ultra HD*)	£15.99
Netflix standard (2 users/HD)	£10.99
Netflix basic (single user/non HD**)	£6.99
Amazon Prime Video	£8.99
Amazon Prime Video – Student price	£4.49
Disney+	£7.99
AppleTV+	£4.99

*This is the highest quality picture currently available

** This is the basic quality picture

(Source adapted from: <https://www.radiotimes.com/tv/what-to-watch-tv/best-streaming-service-uk/>)

Extract A**How Netflix makes use of behavioural science**

In the last few years, companies have been trying to find ways to attract the attention of customers. Various streaming platforms such as Netflix, Amazon, and YouTube use 'nudges' to influence consumer behaviour. The 'next-up' feature on Netflix or 'auto-play' on YouTube has been subject to research that relates it to binge-watching. Binge-watching is the practice of viewing for a prolonged period, multiple episodes of a TV show or several films in rapid succession. 5

Similarly, the policy of offering a one-month free subscription under the label of 'free trial' requires credit card information to turn the forgetful subscriber into a potential paying one. Following this strategy, Netflix has expanded to 190 countries in just seven years and according to the Wall Street Journal, the company generated total revenue of over \$5.2 billion in 2019, which was an increase from 2018 of around \$4 billion. 10

However, 2022 data shows that consumers, increasingly worried about the rising cost of living, are turning their back on Netflix. With a reported cancellation of over 200 000 subscriptions in the first quarter and another two million forecast to leave by the end of the year. Subscribers are rethinking their commitment to the streaming services that grew their numbers sharply during the home-based months of the global health crisis. Netflix subscribers have also quoted a decline in value for money and satisfaction with the quality of the shows as key motives for cancellation. 15

Disney now see higher satisfaction rankings than Netflix across the quality of shows, amount of original content, number of new-release films, variety of classic films and amount of kids' content. Forecast cancellation rates for Disney+ fell to an all-time low of 3.2%. 20

(Source adapted from: <https://www.novanudge.com/post/sludge-on-demand-how-netflix-makes-use-of-behavioural-science>
<https://www.theguardian.com/media/2022/apr/20/netflix-shares-fall-losing-subscribers>)

Extract B**The economics of price discrimination**

Throughout 2022, Netflix, a 100-billion-dollar company, increased prices in the US, Canada, the UK and Ireland (most of which saw similar price increases in 2021, too). In sharp contrast, Netflix recently announced it was reducing its prices in India (standard/2-user 499 rupees a month, equivalent to £5.42) in a bid to compete with Disney+ and Prime. 5

UK students currently enrolled in a college or university who have a valid student email address can join Prime Student through the Amazon website. This gives them nearly 50% off a standard Prime membership and many other exclusive benefits.

(Source adapted from: <https://help.netflix.com/en/node/24926/in>)

Extract C**Educational Website and TV Programmes**

BBC Bitesize is a learning platform created by the BBC in 1998. The online study resource allows parents to teach their children from home, using ready-made lesson plans and study guides with questions for all ages. The revision sessions are free to watch and they are available for children aged five up to their late teens. The guides are written by teachers and subject experts, so they are reliable and follow the National Curriculum. Last year Bitesize attracted around two million weekly unique browsers with a peak week of 3.3 million in the GCSE exam period. 5

Oak National Academy is a freely available learning resource website created for pupils aged four to sixteen. Launched in 2020, as a response to the global health crisis, the website includes lesson slides, video lessons, worksheets, and quizzes conforming to the national curriculum in England. Ministers have set aside £43 million to fund the Oak National Academy over the next three years. 10

(Source adapted from: <https://www.bbc.co.uk/bitesize/articles/zmjdhbk>
<https://www.structural-learning.com/post/oak-academy-a-teachers-guide#:~:text=Oak%20National%20Academy%20is%20a,the%20national%20curriculum%20of%20England>)



(12)







SECTION B

Read Figures 1 and 2 and the following extracts (A to C) before answering Question 6.

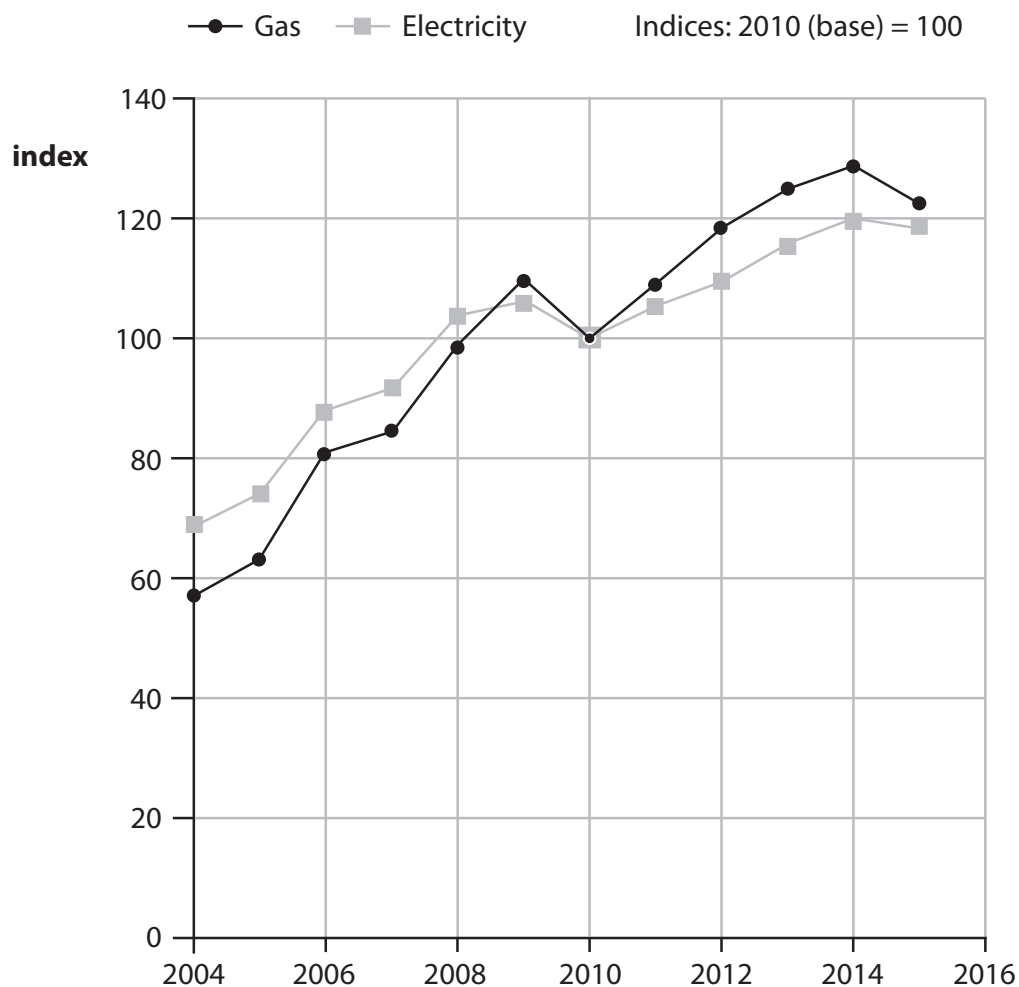
Write your answers in the spaces provided.

You are advised to spend 1 hour on this section.

Question 6

The UK energy market

Figure 1: UK retail electricity and gas real price indices, 2004–2015



(Source: <https://assets.publishing.service.gov.uk/media/5773de34e5274a0da3000113/final-report-energy-market-investigation.pdf>)

Figure 2: UK retail electricity and gas supply: market share by company, 2016

Company	Electricity %	Gas %
British Gas	23	36
EON	16	13
SSE	16	13
EDF	12	8
Scottish Power	11	9
RWE (nPower)	10	9
Other companies	12	12
Total	100	100

(Sources: <https://www.ofgem.gov.uk/chart/electricity-supply-market-shares-company-domestic-gb> and <https://www.ofgem.gov.uk/data-portal/retail-market-indicators>)

Extract A**Competition and Markets Authority (CMA) report into the UK energy market**

An investigation into the UK energy market by the CMA concluded that customers have been paying £1.4 billion a year more than they would in a fully competitive market. It found that 70% of domestic customers of the six largest energy firms were on an expensive standard rate. These customers could each save over £300 a year by switching to a cheaper deal but appear reluctant to do so.

5

However, the CMA investigation found no evidence of anti-competitive practices by firms. There has even been an increase in new entrant energy suppliers over recent years and their combined market share has reached 12% in both gas and electricity supply.

To protect consumers, the CMA has introduced various measures to open up and increase competition in the UK energy market. These include:

10

- the creation of a database designed to help consumers switch energy suppliers – rival suppliers can directly contact these customers
- the conversion of all homes to smart energy meters making it easier for customers to measure energy consumption and switch supplier
- new rules to protect the four million vulnerable customers using prepaid meters – this includes a temporary price cap until smart meters have been installed.

15

(Source: adapted from 'Competition and Markets Authority Final report into Energy Market Investigation' <https://www.gov.uk/government/news/cma-publishes-final-energy-report-in-full>)



Extract B**Proposals to regulate profits in the UK energy market**

Currently energy retail companies make an average profit of 7% of total revenue. The Chairman of the Competition and Markets Authority (CMA) suggested that these profits are as much as five times higher than they should be, given the companies' limited role in marketing, metering and billing customers. He recommended a profit cap of 1.25% of total revenue. 5

However, Scottish Power criticised proposals for regulating profits saying that it would reduce investment in the energy industry and undermine long-term energy provision. The firm claimed that such a low rate of return is below the profit margin made by supermarkets. 10

All six large energy firms are vertically integrated – producing as well as distributing gas and electricity. This can provide efficiency benefits but also harm competition.

(Source: adapted from 'Profit cap doesn't fit with new investment, energy boss warns', by Robin Pagnamenta, *The Times*, 19th September 2016)

Extract C**Skills shortages in the UK energy sector**

The energy sector is facing a skills shortage of engineers and technicians. Some 29% of employers in the gas and electricity industries report unfilled job vacancies compared with an average of 18% across all industries.

A lack of information and advice on career prospects for young people is partly to blame - many graduates have a negative image of the work involved. There is also a lack of students taking science, technology, engineering and maths-based subjects at school and university. Less than one-fifth of the energy sector's workforce are women. 5

The energy sector is characterised by an ageing workforce - data from the UK Labour Force Survey reveal that around two-thirds of workers are aged over 50. These cannot easily be replaced as a long time period is required for training and developing workers' skills in a highly regulated industry. 10

Urgent action is required by businesses and the government to reduce labour immobility to benefit the energy sector. This action could include policies to increase investment in training programmes, recruit skilled workers from overseas, change the industry image and deal with its ageing workforce. 15

(Source: adapted from 'Sector insights: skills and performance challenges in the energy sector', by the UK Commission for Employment and Skills, March 2015; https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/416998/15.03.25_Energy_SLM1_-_evidence_report.pdf)

(15)



Handwriting practice area with 25 horizontal dotted lines.



TOTAL FOR SECTION B = 50 MARKS



SECTION B

Read the following extracts (A to D) before answering Question 6.

Write your answers in the spaces provided.

You are advised to spend 1 hour on this section.

Question 6**The electronics industry****Extract A****Rising prices of electronics devices**

Computer chips act as the “brain” in all electronic devices. Makers of electronic devices face significant increases in the price of computer chips as they try to source enough components, including games consoles, computers and smartphones. The price of some computer chips has jumped from \$0.20 each to more than \$1. The prices of electronic devices have risen for a range of reasons, including higher material costs and the growing popularity of home entertainment.

5

(Source: adapted from <https://www.ft.com/content/8c718a74-cd95-4b2d-ac0e-de0682e4e3cd>)

Extract B**Labour shortages in the electronics industry**

Every year, highly skilled and experienced employees in the electronics industry retire. The current tight labour market has made an already difficult problem of hiring suitable engineering and computing graduates worse, especially since the nature of the industry is becoming increasingly technical. As production becomes more automated, electronics jobs are more likely to require problem solving and analysis than just assembling skills. However, artificial intelligence and other new technologies can help fill some of the skills gap. In addition, by giving hazardous, repetitive, grimy work to robots, human beings can focus on more creative, analytic tasks.

5

10

(Source: adapted from <https://www.ericsson.com/en/blog/2021/12/manufacturing-problems-that-keep-ceos-awake-at-night>)



Extract C**Serious concerns over merger**

The Competition and Markets Authority (CMA) has said the takeover of the Cambridge-based computer chip designer Arm by its US rival Nvidia raises serious competition concerns. It has launched an in-depth investigation into the £29.5 billion deal. The CMA said the merger could reduce choice for firms reliant on computer chips, pushing up prices of products including cars, games consoles and mobile phones. In addition, severe global shortages of computer chips has disrupted the manufacture of a range of electronic goods pushing up costs for firms. 5

Despite this, large electronics firms benefit from economies of scale and are able to finance high-risk innovation and global advertising. 10

(Source adapted from: <https://www.theguardian.com/business/2021/aug/20/watchdog-expresses-concerns-over-nvidias-takeover-of-uk-chip-designer-arm>)

Extract D**The growing problem of electronic waste**

Electronic waste is the fastest growing element of the world's household waste problem. The problem in the UK is particularly bad. The country produces 24.9 kg a person a year – nearly 10 kg more than the EU average. In 2018, 1.2 million tonnes of electrical devices were sold in the UK, and 500 000 tonnes made it to recycling centres. Some appliances are more likely to be recycled than others. The recycling rate for big appliances, such as fridges and cookers, is about 80%. Of small appliances, barely one in five makes it to the recycling centre. As items such as toasters, hairdryers and headphones fit into household bins, they are not often taken to a recycling centre. This causes many problems, such as hazardous substances contaminating soil, water pollution and other external costs. 5 10

Policy makers have a long list of options to combat this problem including stricter regulation, environmental education, taxation and financial incentives. In some countries, for example, household rubbish is weighed and recycling initiatives are subsidised.

(Source adapted from: <https://www.ft.com/content/26e1aa74-2261-11ea-92da-f0c92e957a96>)

(15)







85

SECTION B

Read Figure 1 and the following extracts (A, B and C) before answering Question 6.

Answer ALL Questions 6(a) to 6(e) and EITHER Question 6(f) OR Question 6(g).

You are advised to spend 1 hour 5 minutes on this section.

Question 6

The market for plastic in the UK

Figure 1: Trend in the purchase of single-use plastic bags in millions, UK, 2014 to 2021

2014	2015	2016	2017	2018	2019	2020	2021
7 500	2 120	1 750	1 130	1 040	627	496	197

Extract A

10p charge continues to reduce use of plastic carrier bags

The 5p charge on single-use carrier bags was introduced in supermarkets in 2015. The charge was increased to 10p in 2021 and extended to all businesses.

The UK Environment Minister said that the plastic bag charge has ended the irrational purchase of billions of single-use carrier bags, thereby protecting our landscapes and ensuring millions of pounds are redistributed to worthy causes. This was needed as without this legislation, the market is not able to effectively manage the situation. Consumers are now in the habit of bringing reusable carrier bags when shopping.

5

In addition to single-use carrier bag charges, major retailers have offered bottle deposit return schemes and refillable food and cleaning product options. These provide incentives to consumers to reuse their plastic containers.

10

However, retailers have suggested that most customers do not wish to pay more for cleaning products in reusable packaging. With the average household income falling by 4.3% in 2023, sales of refillable cleaning products are expected to fall from 200 000 to 130 000 this year.

15

(Source adapted from: <https://www.circularonline.co.uk/news/>)



Extract B**Plastic packaging tax**

Food manufacturers have criticised the implementation of a new UK environmental tax, warning it will force them to increase prices for consumers.

The 2018 tax was designed to provide incentives to businesses to use recycled plastic in packaging. Businesses manufacturing or importing 10 tonnes or more a year of plastic packaging that contains less than 30% recycled plastic are taxed at £200 a tonne. Plastic packaging containing more than this will be exempt from the tax. 5

Helene Roberts, Chief Executive of Robinson Packaging, said increased prices for the consumer would be an unintended consequence of the tax. "It will just create inflationary pressures within the supply chain and firms may need to pass this on." A wide range of businesses are affected by the new tax, including retailers importing items such as bin liners, drink bottles and carrier bags. Food manufacturers are particularly impacted as the industry uses 40% of packaging in the UK. 10

(Source adapted from: <https://www.ft.com>)

Extract C**Single-use cups**

An estimated 2.5 billion single-use cups are used in the UK every year by consumers buying coffee from chains and cafes, creating approximately 25 000 tonnes of waste. Research has found that while a 25p charge on single-use cups increases the use of reusable coffee cups in coffee shops, a discount on reusable coffee cups has no impact at all on their use. 5

A 25p charge on single-use cups increases the use of reusable coffee cups by 3.4%. Environmental messaging in cafes, for example posters about litter, increases the use of reusable coffee cups by 2.3%. The availability of reusable cups leads to an increase of 2.5% whereas the distribution of free reusable cups leads to a further increase of 4.3%. 10

"While the increases for individual measures were modest, the greatest behavioural change was when the measures were combined," said Wouter Poortinga of Cardiff University.

(Source adapted from: <https://www.theguardian.com/environment/2017/mar/30/>)

(15)







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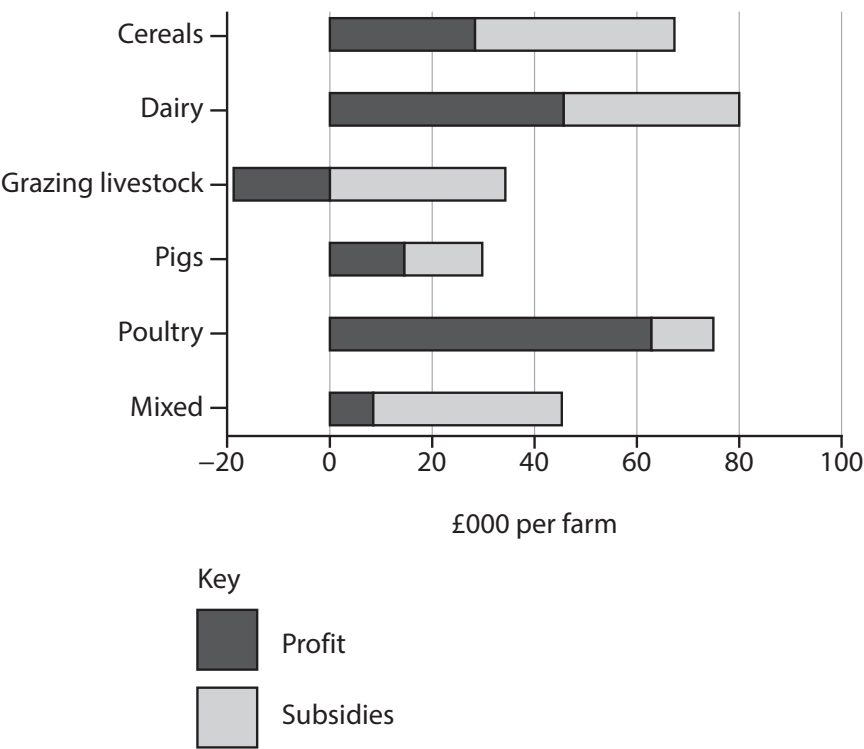
Sources for use with SECTION B

Read the following figures (1 and 2) and extracts (A and B) before answering Question 6.

The market for meat and the growth of vegetarianism

Figure 1

The impact of subsidies on farmer income, in England, 2018–2019 (£000 per farm)



(Source: adapted from www.FT.com)

Figure 2**Potential impact of indirect tax rises on meat prices per kg, 2023–2030**

Type of Meat	Before indirect tax increases	After indirect tax increases
Beef/Veal	£24.24	£29.50
Chicken	£7.60	£8.63

(Source: adapted from Tax beef, pork and chicken to help climate and health, EU urged – CGTN)

Extract A**The case for cutting out meat**

Around a third of Britons are reducing the amount of meat they eat or are cutting it out altogether. Are these consumers right to be cutting out meat? For a start, there are the greenhouse gases released as a result of producing food. The evidence is clear that switching to a plant-based diet would lower emissions. A UK study found that eating a diet high in meat costs 7.2 kg carbon dioxide emissions per day, compared with 3.8 kg for vegetarians. It would also free up land for other uses. Nearly 80% of the world's farmland is dedicated to rearing animals; a plant-based diet would cut the use of land for agriculture by 76%. The land currently used by grazing livestock could be used for "rewilding", allowing the environment and animal species destroyed by meat farming to recover. 5 10

Our health and wealth would be better too. A study published in 2016 modelled what would happen to our health and the global economy if we all switched to vegetarian diets. The economic benefits of switching to plant-based diets could be as much as £700 billion to £1 trillion per year in terms of savings on healthcare costs and lost working days due to ill health. 15

Some economists recommend an increased indirect tax on animal products so that their prices reflect the cost of externalities.

This could impact on European farmers, if adopted by the European Union. The tax could bring £35 billion to the EU, with around £15 billion of that going directly to farmers. The rest would be used to bring down VAT on fruit and vegetables, and fund other policies to encourage healthy-eating diets both in and outside the EU. 20

(Source: adapted from <https://moneyweek.com/499842/the-economic-consequences-of-veganism> December-28-2018)



Extract B**Businesses benefitting from meat-substitute products**

There is one group for whom the trend towards meat-substitute products is definitely a good thing: processed food manufacturers and retailers.

Finest British beef burgers are priced at £6.61 per kg. The 'fake burger' (which is made mostly of pea protein) is priced at £21.81 per kg even though the ingredients used to make them, such as mushrooms, peas and palm oil, are cheaper ingredients than meat. Despite high prices, demand continues to rise for these products. This might benefit shareholders, but is it doing any real good for the rest of us? 5

A large food producer bought meat-substitute product maker Vegetarian Butcher in December 2018 and is moving towards a range with more meat-substitute products. In 2017, Nestlé bought Sweet Earth, a California-based maker of vegetarian foods, and it is launching its own meat-substitute 'Incredible Burger'. It expects its meat-substitute revenues to reach \$1 billion by 2029. 10

As subsidies are being cut in every area of farming, consumers ought to be willing to pay higher prices for all food products. If farmers are to stay in business, they need to find additional sources of revenue such as oyster mushrooms, goji berries and basil. 15

(Source: adapted from <http://www.financialtimes.com/the-veganism-boom-does-more-for-food-company-profits-than-the-planet> February-22-2019)

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SECTION B

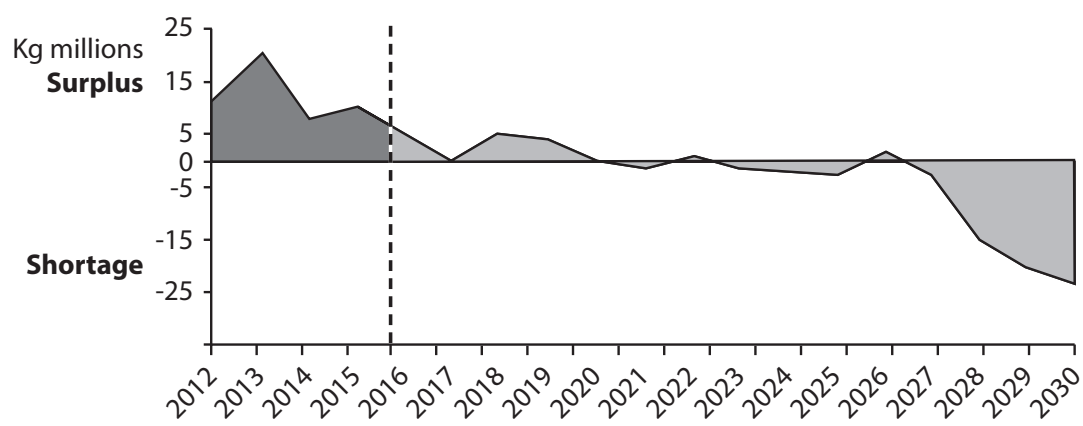
Read Figure 1 and the following extracts (A to C) before answering Question 6.

Answer ALL Questions 6(a) to 6(e) and EITHER Question 6(f) OR Question 6(g).

You are advised to spend 1 hour 5 minutes on this section.

Question 6**Energy markets**

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



Figures from 2016 are forecast

(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. 5

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. 10

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. 15

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. 20

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. 25 30

(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. 5

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. 10

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. 5

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. 10

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



(20)



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(Total for this part = 20 marks)

104

SECTION B

Read Figures 1, 2, 3 and the following extracts (A to B) before answering Question 6.

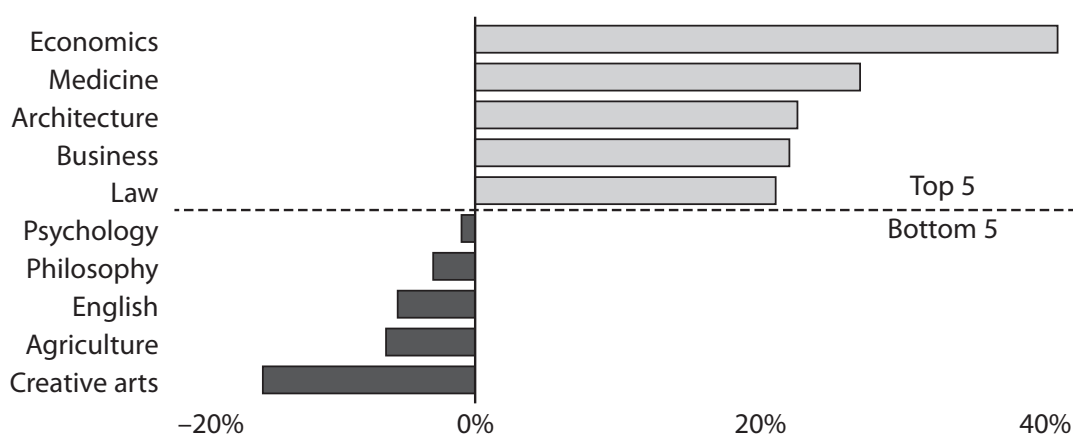
Answer ALL questions 6(a) to 6(e) and EITHER Question 6(f) OR Question 6(g).

You are advised to spend 1 hour and 5 minutes on this section.

Question 6

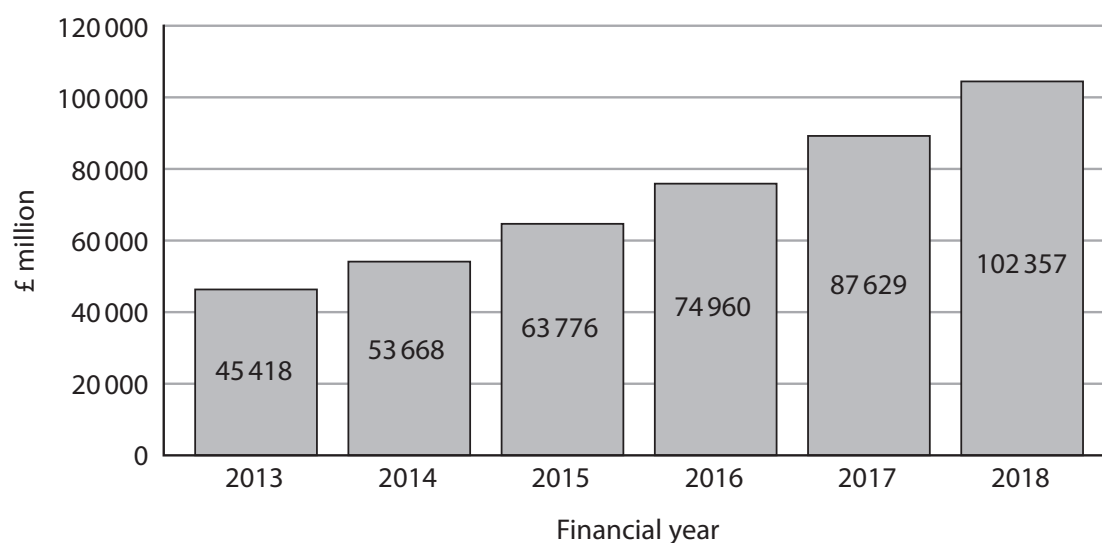
The market for higher education in the UK

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



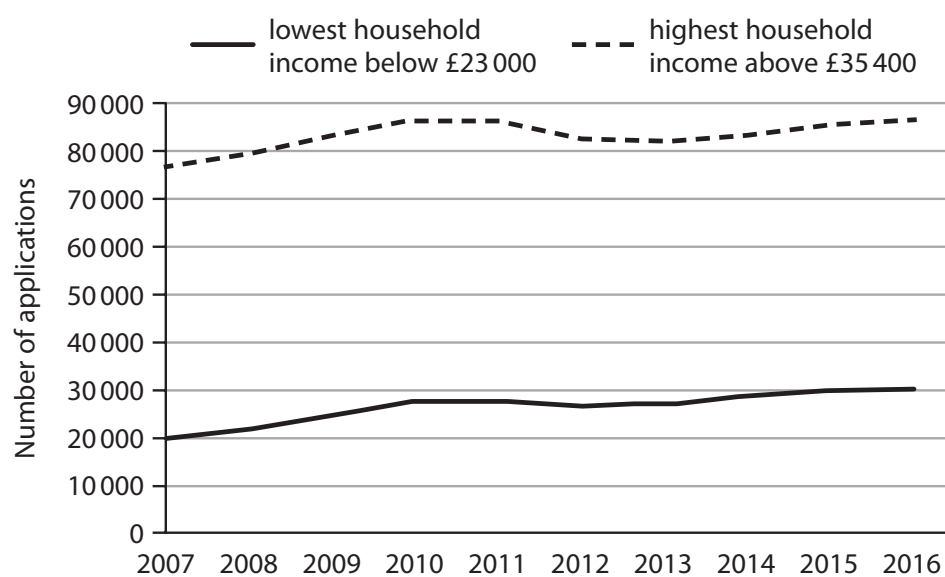
(Source: adapted from <https://www.ifs.org.uk/publications/13731>
The impact of undergraduate degrees on early-career earnings, Research report, November 2018)

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. 5

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. 10

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. 15

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. 20

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. 25

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. 30

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. 35

(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. 5

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. 10

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.' 15

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



(20)







(Total for this part = 20 marks)

112

SECTION B

Read Extracts A and B and Figure 1 before answering Question 6.

Answer ALL Questions 6(a) to 6(e) and EITHER Question 6(f) OR Question 6(g).

You are advised to spend 1 hour and 5 minutes on this section.

Question 6

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. 5

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%.

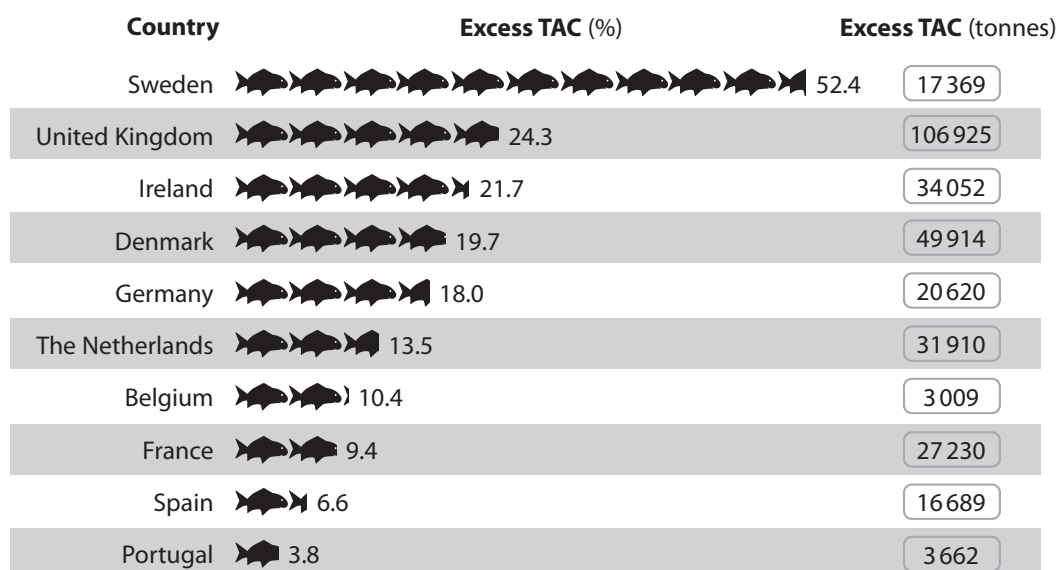
UK Fisheries Minister George Eustice said: "This year there has been mounting scientific evidence suggesting that cod is being overfished in many parts of the northeast Atlantic and we have responded to conserve stocks". 10

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. 15

(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)



(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/>)







(Total for this part = 20 marks)

118

SECTION B

Read Figures 1 and 2 and the following extracts (A to C) before answering Question 6.

Answer ALL Questions 6(a) to 6(e) and EITHER Question 6(f) OR Question 6(g).

You are advised to spend 1 hour and 5 minutes on this section.

Question 6

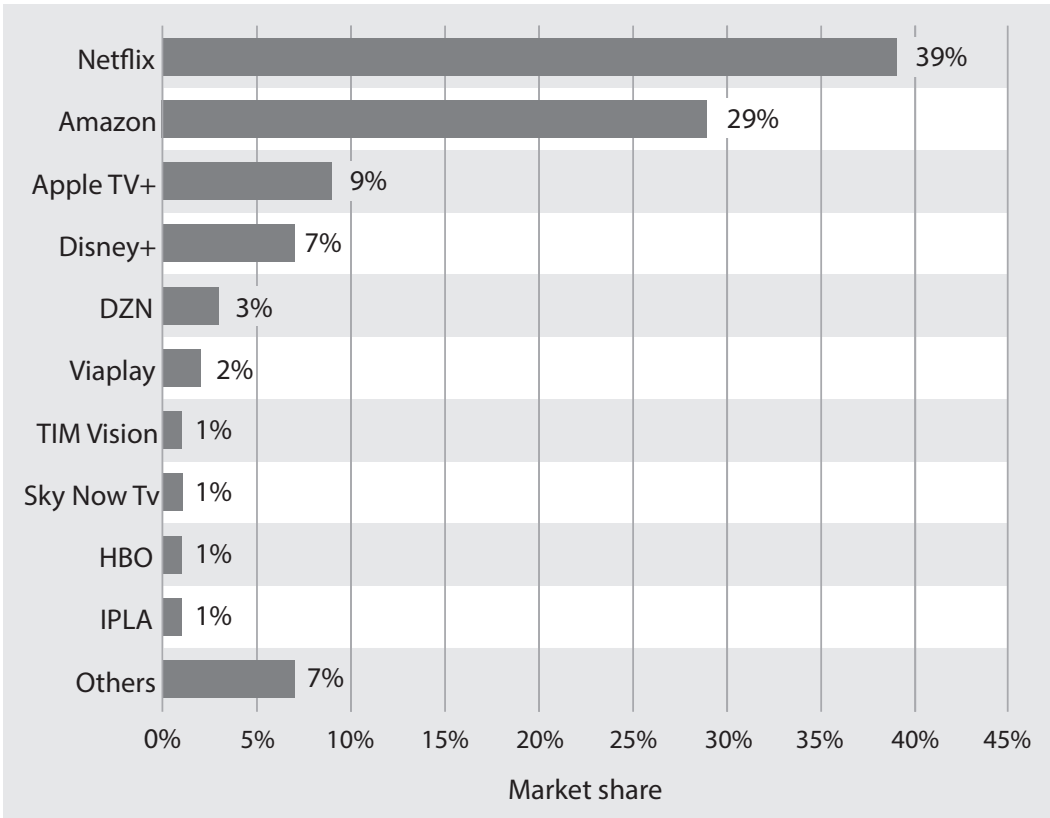
The market for television content

Figure 1: Elasticities of demand for streamed television services, UK, 2021

Price elasticity of demand	−0.6
Income elasticity of demand	1.6

(Source: adapted from <https://www.consultancy.uk/news/24986/covid-19-presents-netflix-with-chance-to-hike-prices>)

Figure 2: Market shares of streamed content providers, Europe, 2021



(Source: adapted from Statista 2021)



Extract A**The growth of streamed television content**

Netflix currently has 13 million UK subscribers, who typically pay £9.99 a month to the US based private sector firm. At this price, up to two users can view the television content at the same time. The demand for individual firms' streamed television content boomed when people were forced to stay at home and has only begun to slow recently as more firms enter the market e.g. Amazon Prime Video. 5

The launch of Disney+ at the end of 2019, including original content such as the £74 million *Star Wars* TV spin-off *The Mandalorian*, resulted in the service adding more UK subscribers in a year in 2020 than any other streaming platform has ever managed.

However, the costs of providing streaming television content have risen. Consumers now expect original content, for example *Stranger Things* which costs around £10 million an episode to make. Furthermore, advertising in a saturated market is expensive. 10

In 2021, Netflix put up the price of its most-popular package by £1 a month to £9.99. Fortunately for Netflix, its subscriber demand has proven price inelastic. Just 3% of customers in a survey said they would definitely cancel their subscription after Netflix's latest price rise. 15

(Source: adapted from 'As UK hits peak, Netflix the streaming giant will have to work harder', The Guardian, Monday 3 January 2022)

Extract B**Is television content a public good?**

Public service broadcasting in the UK is made up of a number of parts. First, there are the main UK-wide public service broadcasters (PSBs). There is the publicly funded BBC, and the publicly owned Channel 4 which is funded through advertisements.

The BBC was established in 1922 by a Royal Charter. It is mainly funded through the TV licence fee, which costs £159 a year and is a compulsory charge for those who watch live TV on any device. Live TV and catch-up services are free to view and do not restrict household usage. Without the licence fee very few people would pay due to the free rider problem. 5

The BBC's Charter sets out its five public purposes: 10

- To provide impartial news and information
- To support learning for people of all ages
- To show the most creative, highest quality and distinctive televised content
- To provide content for minority groups which would not be profitable for a private firm 15
- To reflect the UK, its culture and values to the world.

(Source: adapted from <https://publications.parliament.uk/pa/cm5801/cmselect/cmcumeds/156/15604>, and 'BBC licence fee to be abolished in 2027 and funding frozen', The Guardian, Sunday 16 January 2022)

Extract C**The environmental impact of streaming television content**

The carbon footprint produced by watching a month of Netflix programmes is equivalent to driving a car to Saturn. Every activity in the chain required to stream video, from the use of huge datacentres and transmission over Wi-Fi and broadband to watching the content on a device, requires electricity. The majority of this is generated by emitting CO₂. Modern flatscreen televisions use significant amounts of energy. 5

There's very little a government can do about this in a free market dominated by US firms. The focus of any government intervention could be to encourage alternative forms of entertainment and recreation, support the development of more energy efficient devices, to improve information on the environmental effects or to use regulation to limit viewing hours. 10

(Source: adapted from 'Streaming's dirty secret: how viewing Netflix top 10 creates vast quantity of CO₂', The Guardian, Friday 29 October 2021)



Q) 6 (g) Evaluate the possible disadvantages of a free market approach to the provision of television content.

(20)







(Total for this part = 20 marks)

124

(25)







(Total for this part = 25 marks)

128



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Continue on separate paper if required.





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(Total for this part = 25 marks)

136

SECTION A

Read Figures 1 and 2 and the following extracts (A, B and C) before answering Question 1.

Answer ALL Questions 1(a) to 1(c), and EITHER Question 1(d) OR 1(e).

Write your answers in the spaces provided.

You are advised to spend 1 hour on this section.

Question 1

Turkey – an emerging economy

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

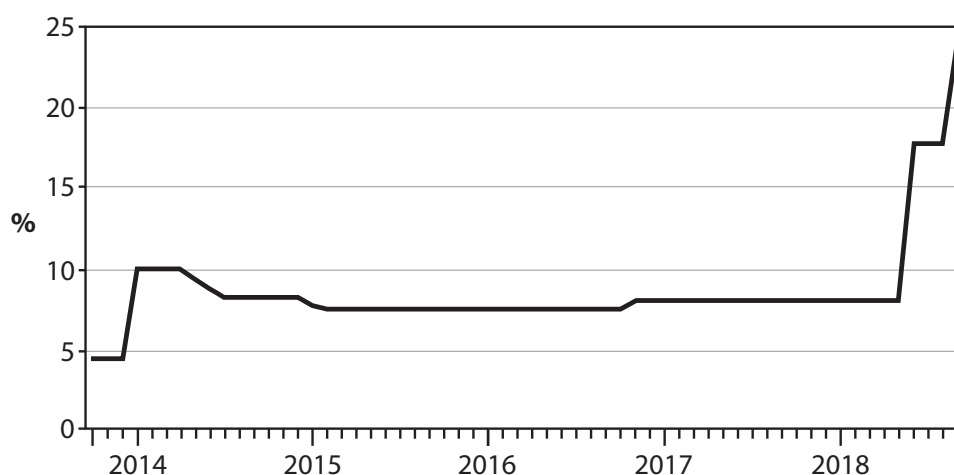
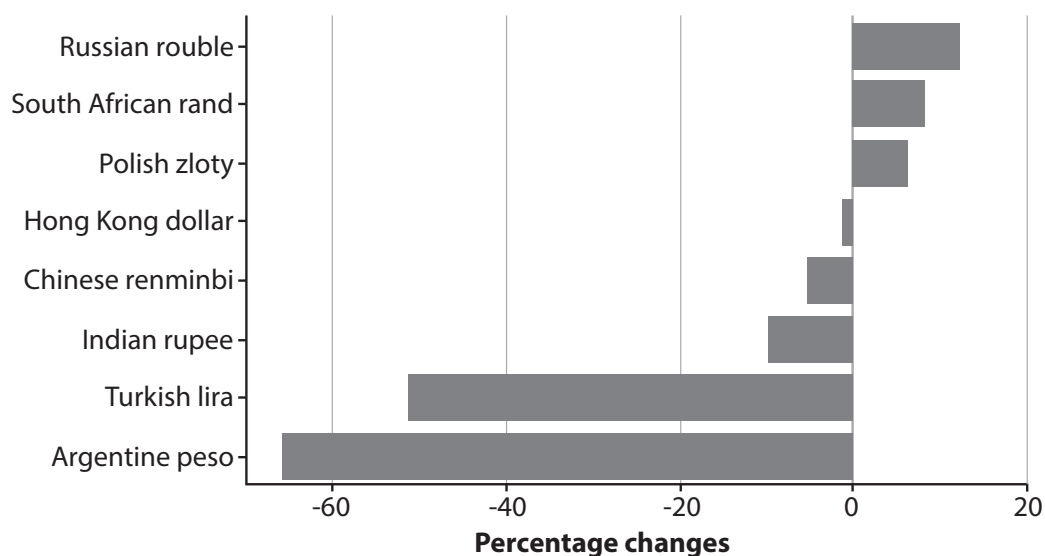


Figure 2: Selected emerging economy exchange rates, percentage change against the US dollar: January 2018 compared to January 2016.



(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. 5

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. 10 15

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. 20

(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 10 000 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. 5

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 20 000 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. 10

(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. 5

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 36 000 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. 10

(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>)



(25)



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(Total for this part = 25 marks)

143

- 8** Using 2021 estimates of carbon emissions, it is estimated that a petrol car journey from London to Glasgow emits approximately 3.3 times more carbon dioxide per passenger than the equivalent journey by train.

(Source adapted from: <https://www.gov.uk/government/statistics/transport-and-environment-statistics-autumn-2021/transport-and-environment-statistics-autumn-2021>)

- Q)** Evaluate possible methods of government intervention to reduce carbon emissions caused by road transport in the UK.

(25)

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7 High Speed 2 (HS2) was a £100 billion UK government rail project designed to expand the existing network. The journey time between London and Manchester would take just 1 hour and 11 minutes, 54 minutes quicker than today's fastest time. Almost 900 homes, 1 000 businesses and around 60 ancient woodlands would be destroyed by its construction. (Source: adapted from <https://www.independent.co.uk/climate-change/news/hs2-railway-route-houses-demolish-woodland-destroy-environment-impact-london-birmingham-manchester-a8582316.html>)

Q) Evaluate the likely microeconomic effects of building major infrastructure projects.

(25)

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(Total for this part = 25 marks)

Continue on separate paper if required.



8 In 2023, the UK prime minister Rishi Sunak said that he wanted to see all students in England study some form of mathematics until they reach the age of 18 to 'ensure that they leave school better equipped for the jobs of the future'. This would require additional spending on education. Just half of all 16 to 19 year-olds study mathematics. Yet in a world where data is everywhere and statistics are vital in every job, the workforce will require more analytical skills than ever before.

(Source: adapted from <https://educationhub.blog.gov.uk/2023/01/04/studying-maths-to-18-what-you-need-to-know/>)

Q) Evaluate the likely microeconomic effects of increased spending on education.

(25)

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(Total for this part = 25 marks)

SUB-TOPIC 1.3.3

PUBLIC GOODS

Sub-topic 1.3.3 · 10 questions · 56 marks · lowest tariff first



- 5** 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.

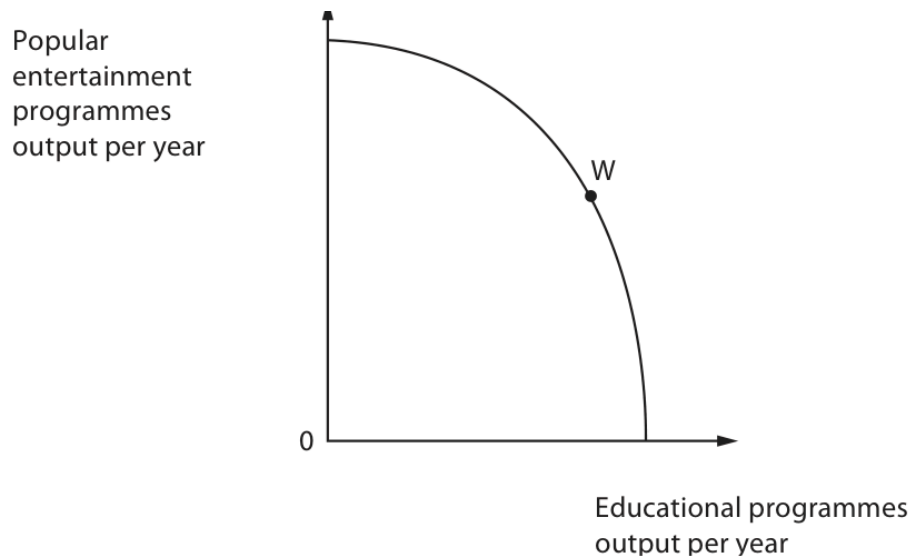
(a) Define the term 'consumer surplus'.

(1)

(Total for Question 5(a) = 1 mark)



- 5 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.



- (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 5(c) = 1 mark)



SECTION A

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

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 ☒.

You are advised to spend 25 minutes on this section.

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

- 1** Since 2015, the government has invested £74 million on a flood defence scheme in the Calder Valley. The scheme will protect homes, businesses and jobs.

(Source: <https://www.theguardian.com/uk-news/2020/feb/10/yorkshire-residents-criticise-delays-to-flood-defence-scheme>)

(a) What are the characteristics of a private good?

(1)

- ☐ **A** Non-rivalrous and excludable
- ☐ **B** Non-rivalrous and non-excludable
- ☐ **C** Rivalrous and excludable
- ☐ **D** Rivalrous and non-excludable

(Total for Question 1(a) = 1 mark)



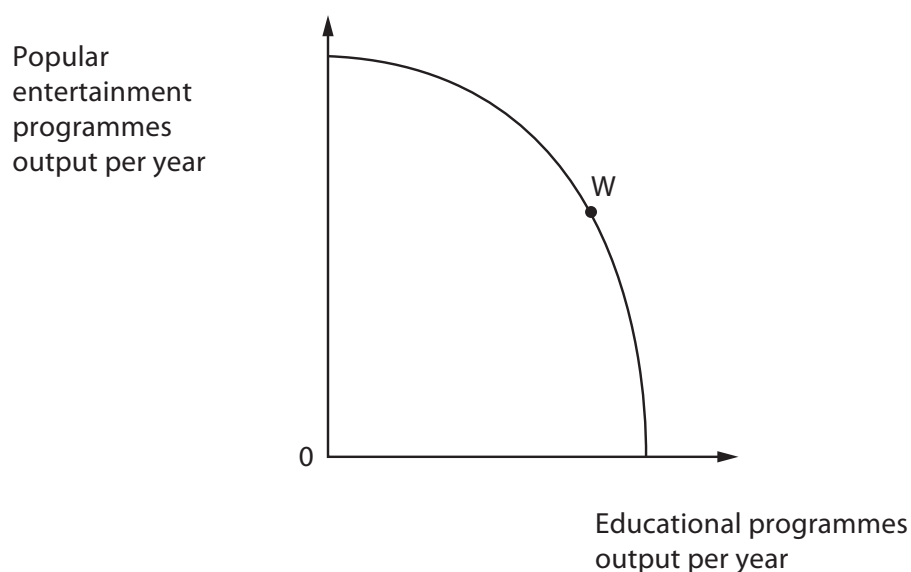
- 5 The British Broadcasting Corporation (BBC) is a TV broadcaster. It is financed through an annual TV licence fee of £145.50. At this fee level many TV owners benefit from consumer surplus.

(a) Define the term 'consumer surplus'.

(1)

- (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 5 = 4 marks)

TOTAL FOR SECTION A = 20 MARKS



SECTION A

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

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 ☒.

You are advised to spend 25 minutes on this section.

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

- 1** Since 2015, the government has invested £74 million on a flood defence scheme in the Calder Valley. The scheme will protect homes, businesses and jobs.

(Source: <https://www.theguardian.com/uk-news/2020/feb/10/yorkshire-residents-criticise-delays-to-flood-defence-scheme>)

- (b) Explain why flood defences such as those in the Calder Valley are usually provided by the public sector.

(3)

(Total for Question 1(b) = 3 marks)



- 5 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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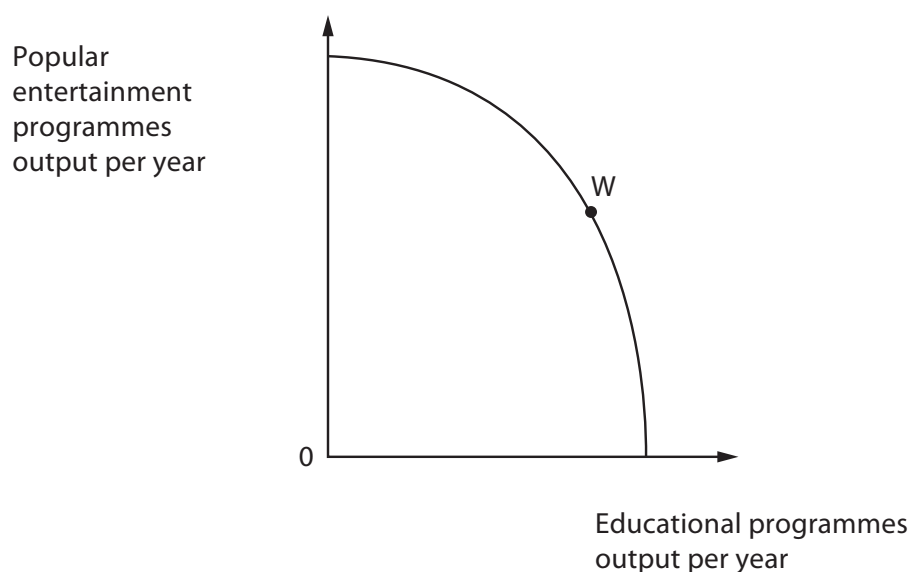
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- ☐ D there are external benefits from the consumption of many BBC programmes

(Total for Question 5 = 4 marks)

TOTAL FOR SECTION A = 20 MARKS



SECTION A**Answer ALL questions. Write your answers in the spaces provided.****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 ☒.****You are advised to spend 25 minutes on this section.****Use the data to support your answers where relevant. You may annotate and include diagrams in your answers.**

- 1** Since 2015, the government has invested £74 million on a flood defence scheme in the Calder Valley. The scheme will protect homes, businesses and jobs.

(Source: <https://www.theguardian.com/uk-news/2020/feb/10/yorkshire-residents-criticise-delays-to-flood-defence-scheme>)

- (a) What are the characteristics of a private good?

(1)

- ☐ **A** Non-rivalrous and excludable
- ☐ **B** Non-rivalrous and non-excludable
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(3)

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(Total for Question 1 = 4 marks)

SECTION B

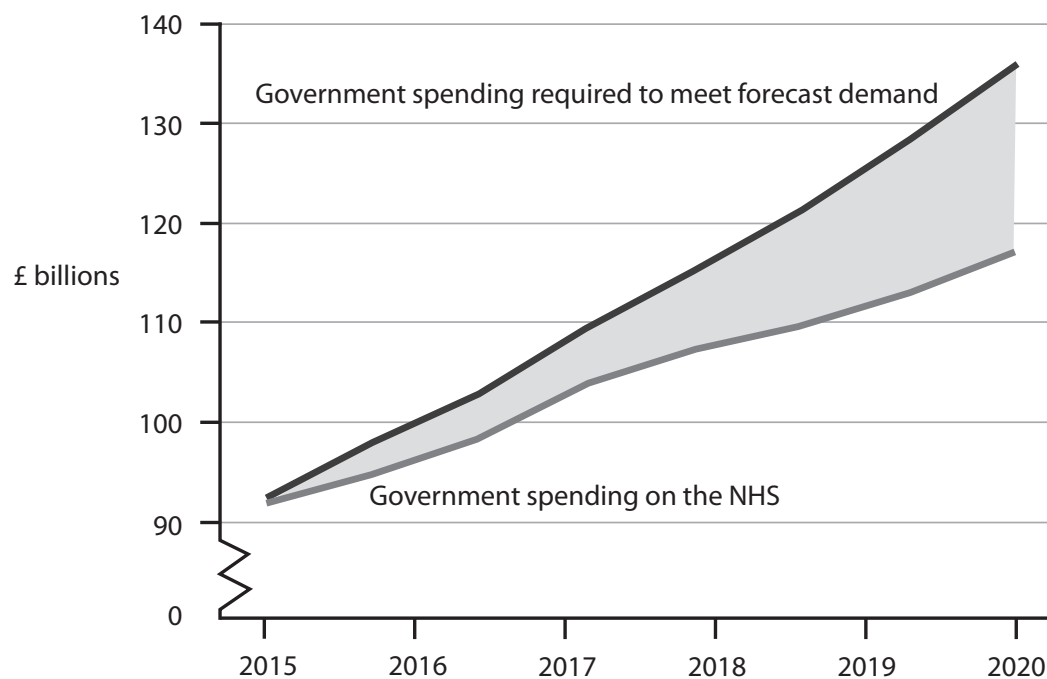
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You are advised to spend 1 hour 5 minutes on this section.

Question 6**Health provision**

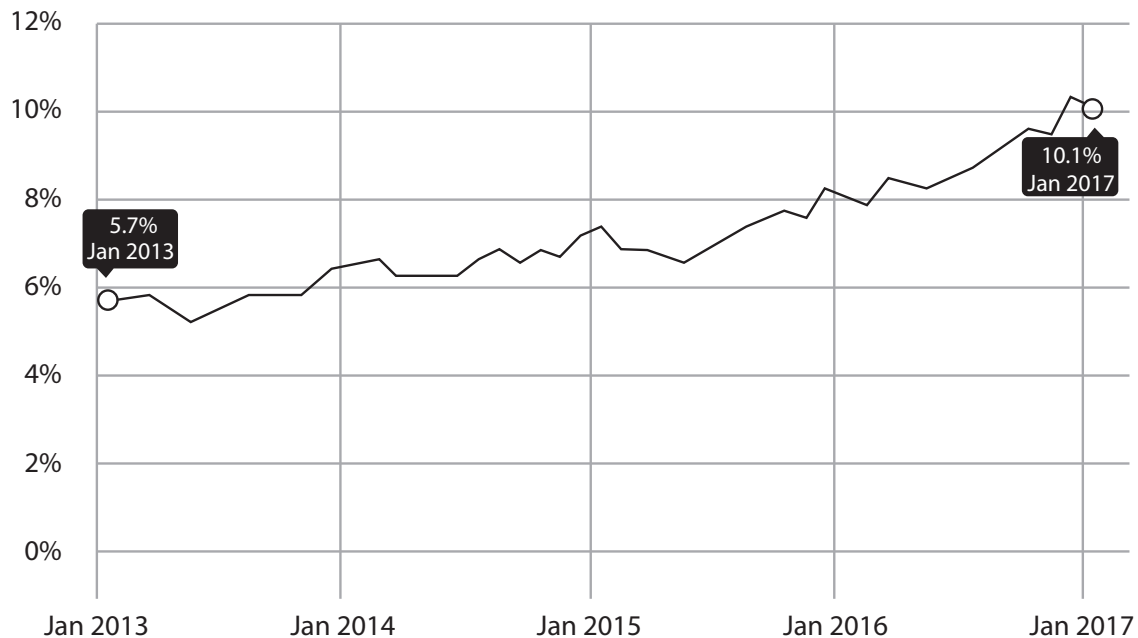
Figure 1: National Health Service (NHS) in England: Government spending and projected funding gap, £ billions, 2015 to 2020



(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.

5

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.

10

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. 5

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. 10

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. 15

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. 20

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. 25

(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. 5

(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/>)



(10)





[illegible]

SECTION B

Read Figures 1 and 2 and the following extracts (A to C) before answering Question 6.

Answer ALL Questions 6(a) to 6(e) and EITHER Question 6(f) OR Question 6(g).

You are advised to spend 1 hour and 5 minutes on this section.

Question 6

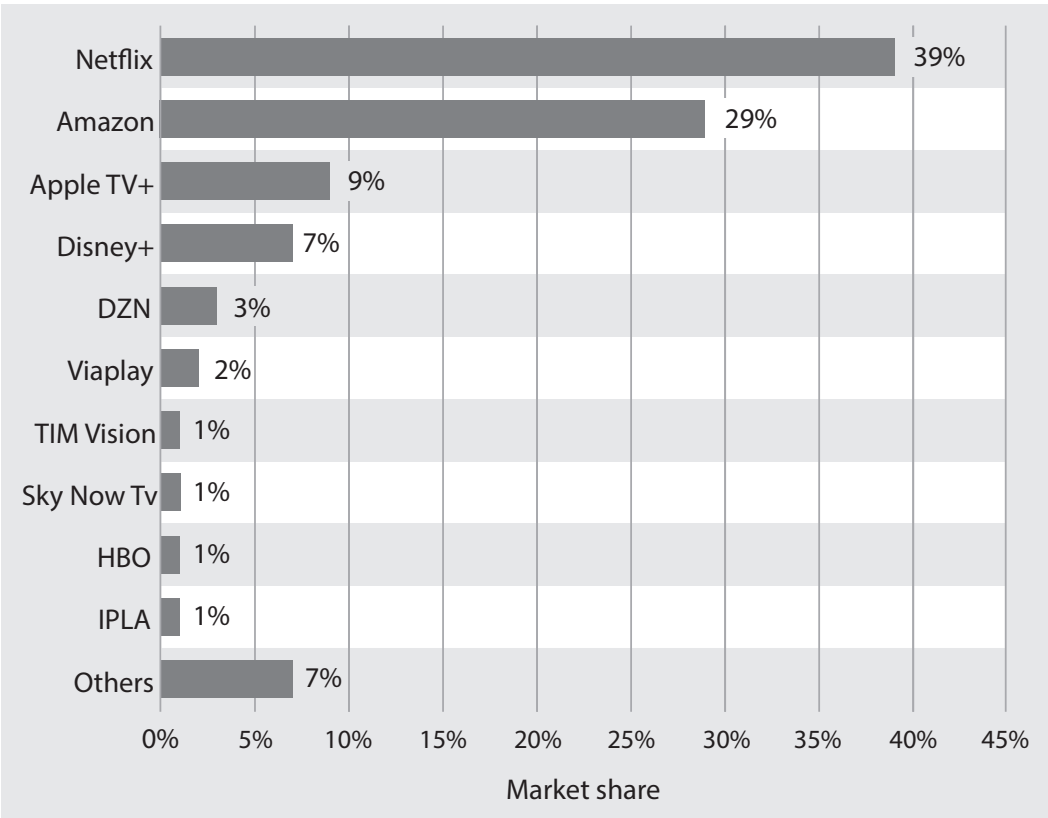
The market for television content

Figure 1: Elasticities of demand for streamed television services, UK, 2021

Price elasticity of demand	−0.6
Income elasticity of demand	1.6

(Source: adapted from <https://www.consultancy.uk/news/24986/covid-19-presents-netflix-with-chance-to-hike-prices>)

Figure 2: Market shares of streamed content providers, Europe, 2021



(Source: adapted from Statista 2021)



Extract A**The growth of streamed television content**

Netflix currently has 13 million UK subscribers, who typically pay £9.99 a month to the US based private sector firm. At this price, up to two users can view the television content at the same time. The demand for individual firms' streamed television content boomed when people were forced to stay at home and has only begun to slow recently as more firms enter the market e.g. Amazon Prime Video. 5

The launch of Disney+ at the end of 2019, including original content such as the £74 million *Star Wars* TV spin-off *The Mandalorian*, resulted in the service adding more UK subscribers in a year in 2020 than any other streaming platform has ever managed.

However, the costs of providing streaming television content have risen. Consumers now expect original content, for example *Stranger Things* which costs around £10 million an episode to make. Furthermore, advertising in a saturated market is expensive. 10

In 2021, Netflix put up the price of its most-popular package by £1 a month to £9.99. Fortunately for Netflix, its subscriber demand has proven price inelastic. Just 3% of customers in a survey said they would definitely cancel their subscription after Netflix's latest price rise. 15

(Source: adapted from 'As UK hits peak, Netflix the streaming giant will have to work harder', The Guardian, Monday 3 January 2022)

Extract B**Is television content a public good?**

Public service broadcasting in the UK is made up of a number of parts. First, there are the main UK-wide public service broadcasters (PSBs). There is the publicly funded BBC, and the publicly owned Channel 4 which is funded through advertisements.

The BBC was established in 1922 by a Royal Charter. It is mainly funded through the TV licence fee, which costs £159 a year and is a compulsory charge for those who watch live TV on any device. Live TV and catch-up services are free to view and do not restrict household usage. Without the licence fee very few people would pay due to the free rider problem. 5

The BBC's Charter sets out its five public purposes: 10

- To provide impartial news and information
- To support learning for people of all ages
- To show the most creative, highest quality and distinctive televised content
- To provide content for minority groups which would not be profitable for a private firm 15
- To reflect the UK, its culture and values to the world.

(Source: adapted from <https://publications.parliament.uk/pa/cm5801/cmselect/cmcomeds/156/15604>, and 'BBC licence fee to be abolished in 2027 and funding frozen', The Guardian, Sunday 16 January 2022)

Extract C**The environmental impact of streaming television content**

The carbon footprint produced by watching a month of Netflix programmes is equivalent to driving a car to Saturn. Every activity in the chain required to stream video, from the use of huge datacentres and transmission over Wi-Fi and broadband to watching the content on a device, requires electricity. The majority of this is generated by emitting CO₂. Modern flatscreen televisions use significant amounts of energy. 5

There's very little a government can do about this in a free market dominated by US firms. The focus of any government intervention could be to encourage alternative forms of entertainment and recreation, support the development of more energy efficient devices, to improve information on the environmental effects or to use regulation to limit viewing hours. 10

(Source: adapted from 'Streaming's dirty secret: how viewing Netflix top 10 creates vast quantity of CO₂', The Guardian, Friday 29 October 2021)



(10)





This image shows a full page of white paper with horizontal dotted lines. The lines are evenly spaced and run across the width of the page, providing a guide for handwriting or typing. There are no margins, text, or other markings on the page.

SECTION B

Read the following Figures (1 to 2) and Extracts (A to B) before answering Question 6.

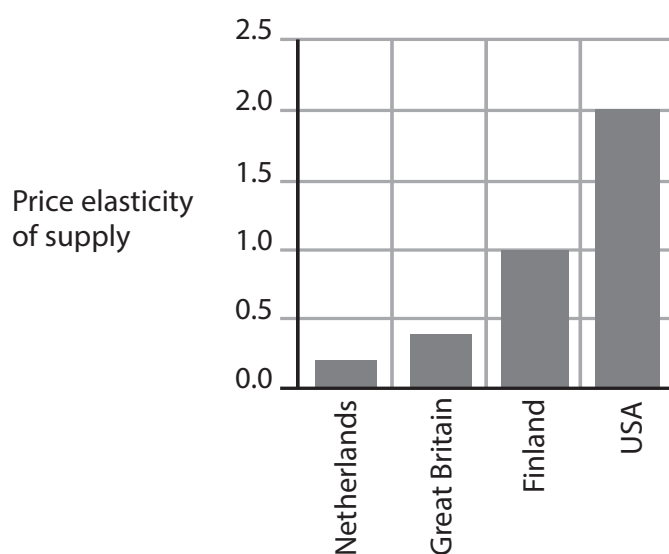
Answer ALL Question 6 (a) to 6 (e) and EITHER Question 6 (f) OR Question 6 (g).

You are advised to spend 1 hour and 5 minutes on this section.

Question 6

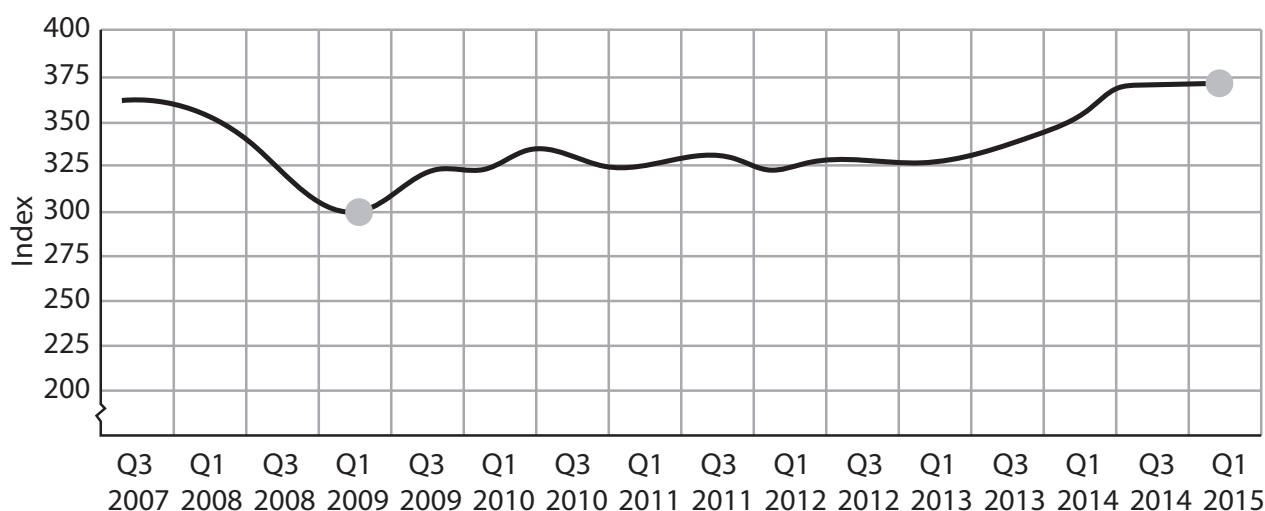
The market for housing

Figure 1 – Estimates of the price elasticity of supply of new housing, selected countries



(Source: adapted from Caldera Sánchez, A. and Å. Johansson (2011), "The Price Responsiveness of Housing Supply in OECD Countries", Figure 3, OECD Economics Department Working Papers, No. 837, OECD Publishing. <http://dx.doi.org/10.1787/5kgk9qhrnn33-en>)

Figure 2 – Index of UK house prices (1993 = 100)



(Source: <http://www.nationwide.co.uk/about/house-price-index/download-data#~>)



Extract A**Problems facing UK first time buyers**

Over a third of aspiring first time buyers in the UK have given up hope of ever being able to save for a deposit to buy a property, new research has found. A deposit is the minimum amount that must be paid upfront when buying a property, which is a proportion of the price of the property.

The UK Government has a Help to Buy scheme designed to help people buy a home. The government subsidises the mortgage (loan) needed to buy a property, so buyers require a smaller amount saved as a deposit. Under this scheme, first time buyers need as little as a 5% deposit to qualify for a mortgage. This is due to end in the first few months of 2017. The research from mortgage insurer Genworth says this will mean a return to 20% deposits, which would see the average time needed to save for a deposit rise from three years to over 10 years. 5 10

"Trying to buy your first home in the current climate is like chasing a runaway train. Even with good salaries that could comfortably support a mortgage, thousands of aspiring first time buyers can only save modest sums, especially those who are already paying rent. This deposit trap is why many feel they are left with the all or nothing choice of borrowing from family or waving goodbye to ever owning a home," said Simon Crone, a vice president at Genworth. 15

"Help to Buy has significantly improved access to mortgages with deposits that are actually realistic to save. The numbers using the scheme may be modest, but it has made significant inroads in the short-term to boost access at the lower end of the property market," he pointed out. 20

(Source: adapted from <http://www.propertywire.com/news/europe/uk-first-time-buyers-201409309641.html> September 2014)

Extract B**Housing and flood defences**

A radical new approach to housing and a £2.3 billion of investment in flood defences were announced as part of the UK Government's new National Infrastructure Plan 2014.

One key proposal is for the government to plan, build and sell homes. An initial programme on a government-owned former airfield near Cambridge will see the development of 10 000 homes. This approach will fast track the development by providing certainty and making new homes available more quickly. 5

The government will make the initial investment but expects that later costs will be met through the sale of land and homes. It will also evaluate the feasibility and economic effects of rolling out this model on a wider scale, to support and accelerate housing supply. 10

The plan also commits to £2.3 billion of capital investment to over 1400 flood defence projects in a 6-year programme of investment. As a result, over 300 000 homes will be better protected and over £30 billion of economic damages prevented. Major projects that will benefit include £42 million for the Oxford Flood Alleviation Scheme, £80 million for the Humber Estuary and over £17 million for Tonbridge, Yalding and the surrounding communities. 15

(Source: adapted from <https://www.gov.uk/government/news/ambitious-plans-for-housing-flood-defence-and-roads-set-out-in-national-infrastructure-plan-2014>)



Q) 6 (g) Evaluate the case for government provision of goods and services such as flood defence schemes or housing.

(20)







(Total for this part = 20 marks)

180

SUB-TOPIC 1.3.4

INFORMATION GAPS

Sub-topic 1.3.4 · 8 questions · 68 marks · lowest tariff first



- 4 Nearly 750 000 consumers in Britain face unresolved problems with used car purchases every year. Older vehicles tend to have more faults and increase the risks facing a potential buyer.

(Source: adapted from <https://www.gov.uk/government/news/new-approach-to-give-second-hand-car-buyers-a-better-deal>)

- (b) In September 2022, the online retailer, Amazon, increased the price of its Prime service from £7.99 a month to £8.99. As a result, almost 600 000 people cancelled their subscriptions.

(Source: adapted from <https://www.telegraph.co.uk/business/2022/08/17/hundreds-thousands-uk-households-ditch-amazon-prime/>)

Which **one** of the following is the most likely explanation of this behaviour?

These consumers:

(1)

- ☐ A aim to maximise profits
- ☐ B aim to maximise utility
- ☐ C demonstrate habitual behaviour
- ☐ D demonstrate weakness at computation

(Total for Question 4(b) = 1 mark)



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(Source: adapted from <https://www.gov.uk/government/news/new-approach-to-give-second-hand-car-buyers-a-better-deal>)

(a) With reference to the data above, explain how imperfect market information may lead to a misallocation of resources in the used-car market.

(4)

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(Total for Question 4 = 5 marks)

SECTION B

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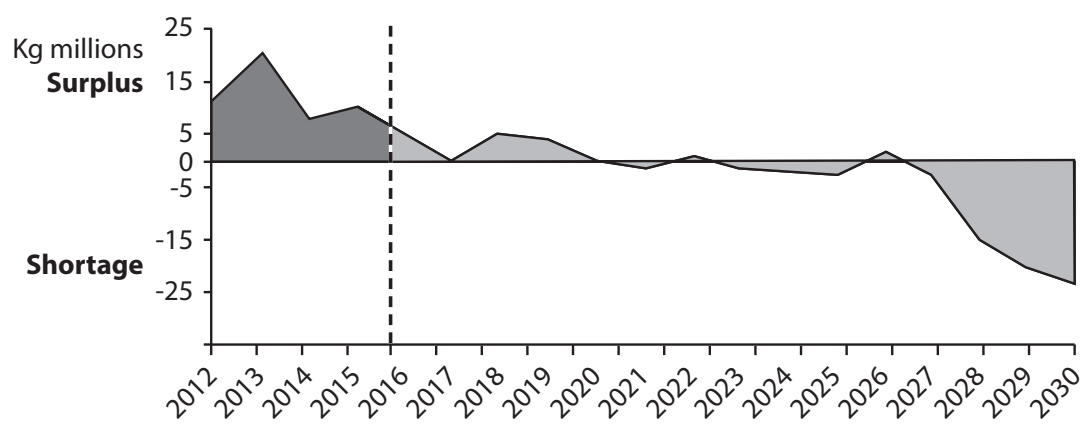
Answer ALL Questions 6(a) to 6(e) and EITHER Question 6(f) OR Question 6(g).

You are advised to spend 1 hour 5 minutes on this section.

Question 6

Energy markets

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



Figures from 2016 are forecast

(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. 5

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. 10

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. 15

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. 20

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. 25 30

(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. 5

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. 10

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. 5

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. 10

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



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

(6)



SECTION B

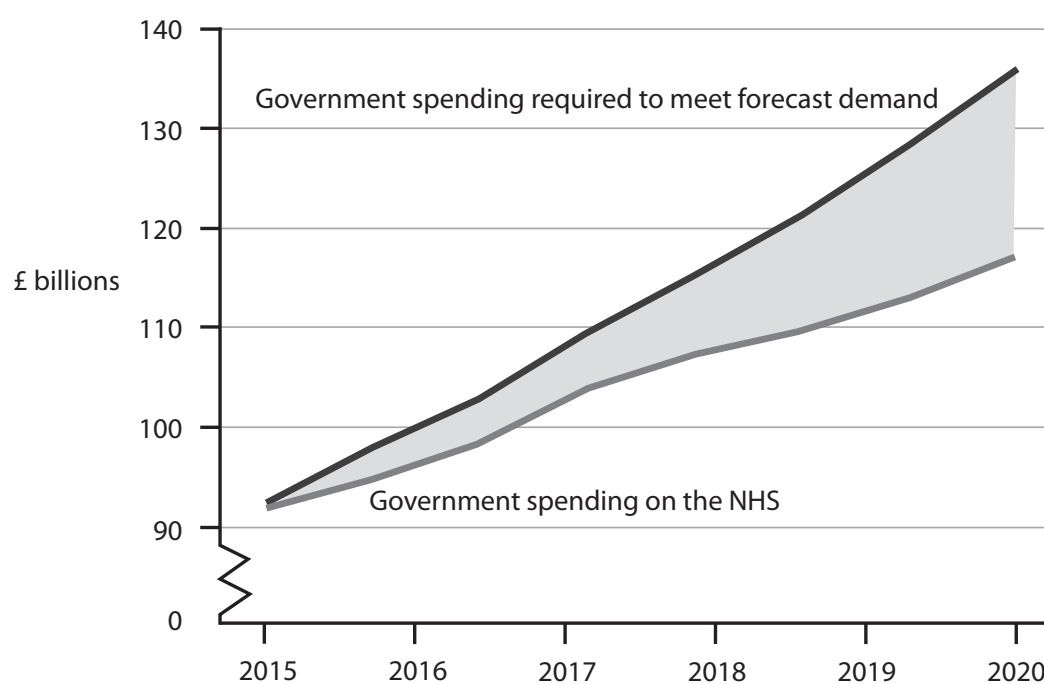
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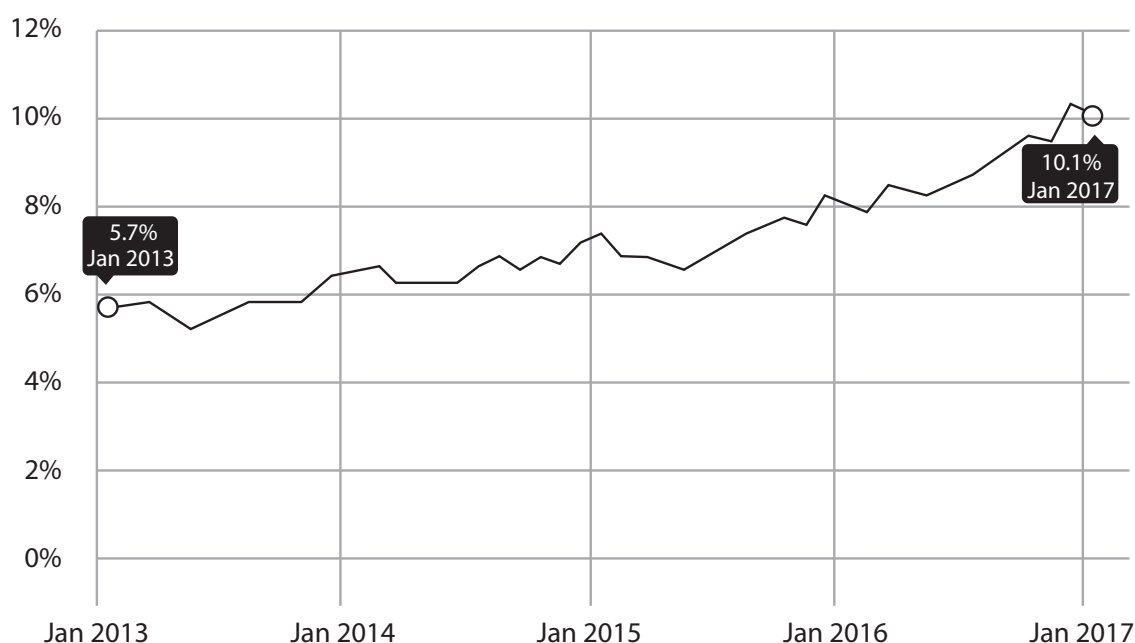
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(Source: <https://www.statista.com/chart/8813/more-and-more-people-made-to-wait-by-the-nhs/>)

Extract A

Hospitals already full

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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.

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(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. 5 10

(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/>)



(6)



SECTION B

Read Figures 1 and 2 and the following extracts (A to C) before answering Question 6.

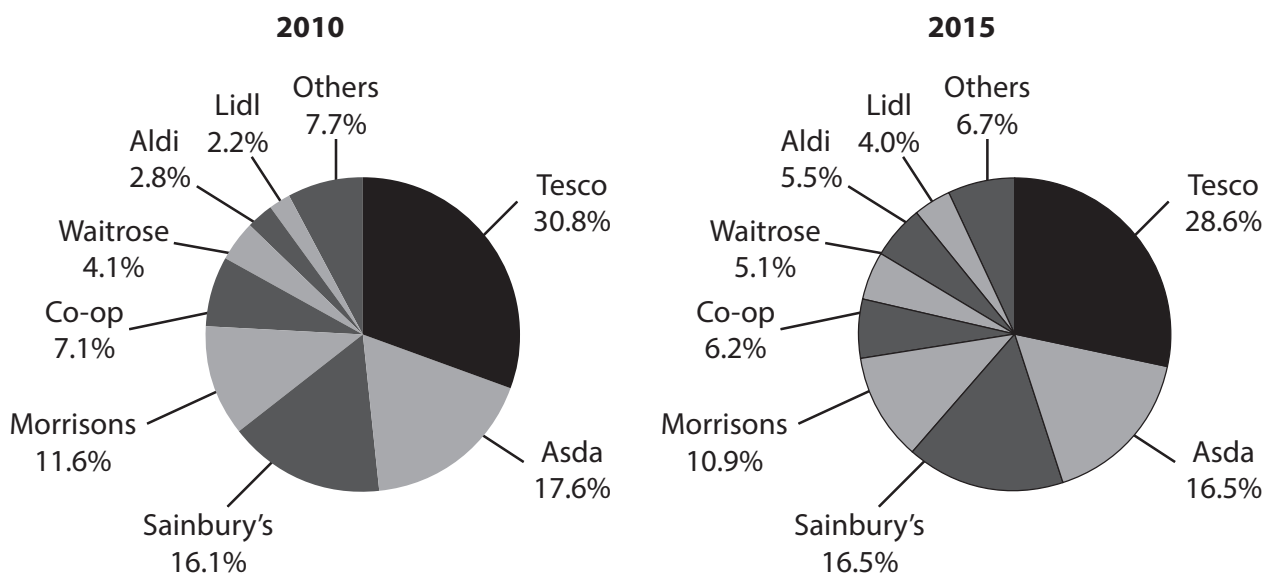
Write your answers in the spaces provided.

You are advised to spend 1 hour on this section.

Question 6

Supermarket price war, food waste and possible mergers

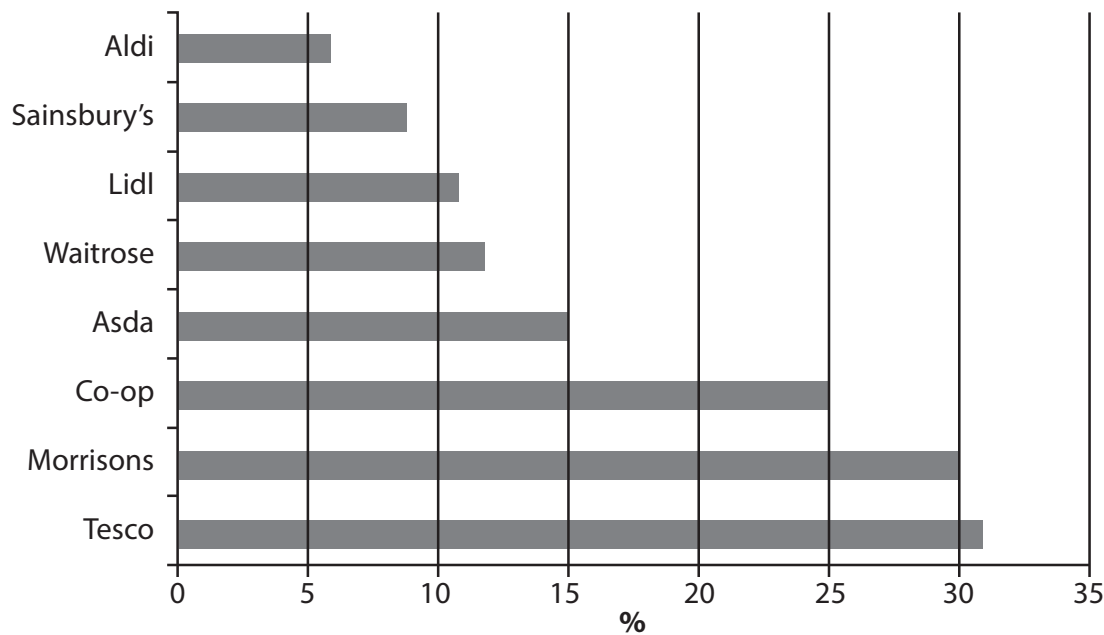
Figure 1: Market shares by total revenue in the UK supermarket sector, 2010 and 2015



(Source: Kantar worldpanel, <http://www.kantarworldpanel.com/en/grocery-market-share/great-britain/snapshot/11.10.15/>)



Figure 2: Proportion of food suppliers reporting that the following supermarkets fail to meet the Groceries Code of Conduct, 2015.



(Source: YouGov poll of more than 1100 food suppliers to supermarkets.
Reported in The Times, 23 June 2015)

Extract A

Supermarket price war puts pressure on their food suppliers

The number of food suppliers (to supermarkets) struggling to remain in business has increased by more than 50% over the past year as supermarkets engage in an intense price war. It has never been tougher for the UK's food suppliers according to a study by accountants Begbies Traynor. It blames aggressive price-cutting by the supermarkets and delays in payments to food suppliers as the main causes of the difficulties. Further problems include food suppliers being forced to pay excessive amounts for packaging specified by supermarkets and funding in-store promotions. Almost 90% of struggling food suppliers are small and medium-sized businesses.

The price war has contributed to food prices paid by consumers falling by 1.7% over the past two years.

The market shares of the big four supermarkets – Tesco, Asda, Sainsbury's and Morrisons – are under pressure as shopping habits change. Many consumers are switching from one main weekly shop to shopping more frequently at local discount stores such as Aldi and Lidl or purchasing goods online from other grocery retailers.

The big four supermarkets have responded by putting more pressure on their suppliers despite an investigation by the Groceries Code Adjudicator (GCA). The GCA has the power to fine supermarkets up to 1% of their annual sales revenue if they break the Groceries Code of Conduct. A YouGov study found considerable differences between the supermarkets in meeting the Code with Aldi performing well but Tesco badly. Despite the Groceries Code, many food suppliers are reluctant to complain for fear of losing contracts with the supermarkets.

(Source: adapted from 'Supermarket price war takes toll on UK food suppliers'. Rupert Jones, The Guardian, 20th July 2015)

Extract B**Food waste in the supply chain**

A report from the British Retail Consortium reveals that supermarkets are directly responsible for around 0.2 million tonnes of food waste every year. This is due to the expiry of use-by-dates and poor handling of stock.

However, 4.1 million tonnes of food waste occurs annually in the food supply chain before it even reaches the supermarkets, indicating the existence of information gaps. The supermarkets are cooperating with food suppliers and farmers to try to reduce this waste. This involves improving forecasts for supply and demand of food and increasing the reliability of transportation and storage.

5

Consumers, the final stage of the supply chain, waste a further 7 million tonnes of food each year. This suggests irrational behaviour. Supermarkets are also working with consumers to reduce the waste by providing advice on how to store and use leftover food. The development of packaging designs to keep food fresher for longer is one of the innovations under way to reduce waste.

10

(Source: adapted from 'Supermarkets tally up food waste bill'. Will Nicholls, in Businessgreen, 19th January 2015. <http://www.businessgreen.com/bg/news/2390792/supermarkets-tally-up-food-waste-bill>)

Extract C**Proposed merger activity in the supermarket sector**

Analysts at Société Générale, an investment bank, have recommended a merger between Sainsbury's and Morrisons. They claim it would lead to increased economies of scale and market power for the combined business. Such a merger between the third and fourth largest supermarkets in Britain would have been unrealistic a few years ago due to concerns of its impact in reducing competition. However, the chances of getting permission from the Competition and Markets Authority have increased following the growth of Aldi and Lidl. Giant mergers have been approved in other sectors such as Lloyds-HBOS (banking) and British Telecom-EE (telecommunications).

5

The suggested merger would have its challenges. There is considerable overlap between the locations of the stores and the enlarged company would require the rationalisation and co-ordination of hundreds of thousands of employees. A new expensive IT system is likely to be required and the underlying difficult market trends would remain in the food retailing industry.

10

(Source: adapted from 'Tesco-bury and AS-Morrisons. Could Britain's supermarkets be about to merge?' Graham Ruddick, in The Telegraph, 16th December, 2015. <http://www.telegraph.co.uk/finance/newsbysector/retailandconsumer/11699724/Tesco-burys-and-AS-Morrisons.-Could-Britains-supermarkets-be-about-to-merge.html>)



(10)



Handwriting practice area with 25 horizontal dotted lines.



This image shows a full page of white paper with horizontal dotted lines. The lines are evenly spaced and run across the width of the page, providing a guide for handwriting or typing. There are no margins, text, or other markings on the page.

SECTION B

Read Figures 1 and 2 and extracts (A to C) before answering Question 6.

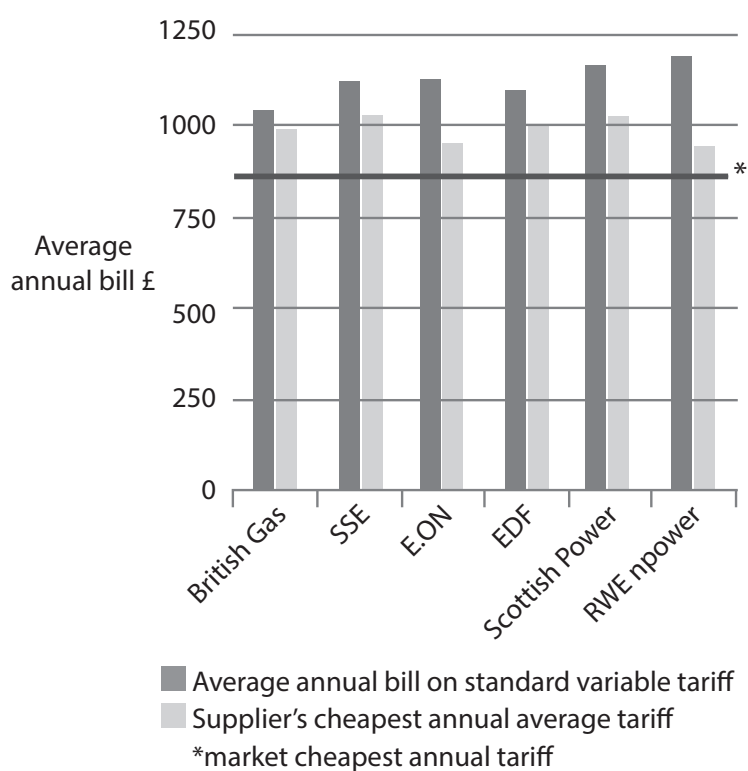
Write your answers in the spaces provided.

You are advised to spend 1 hour on this section.

Question 6

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**

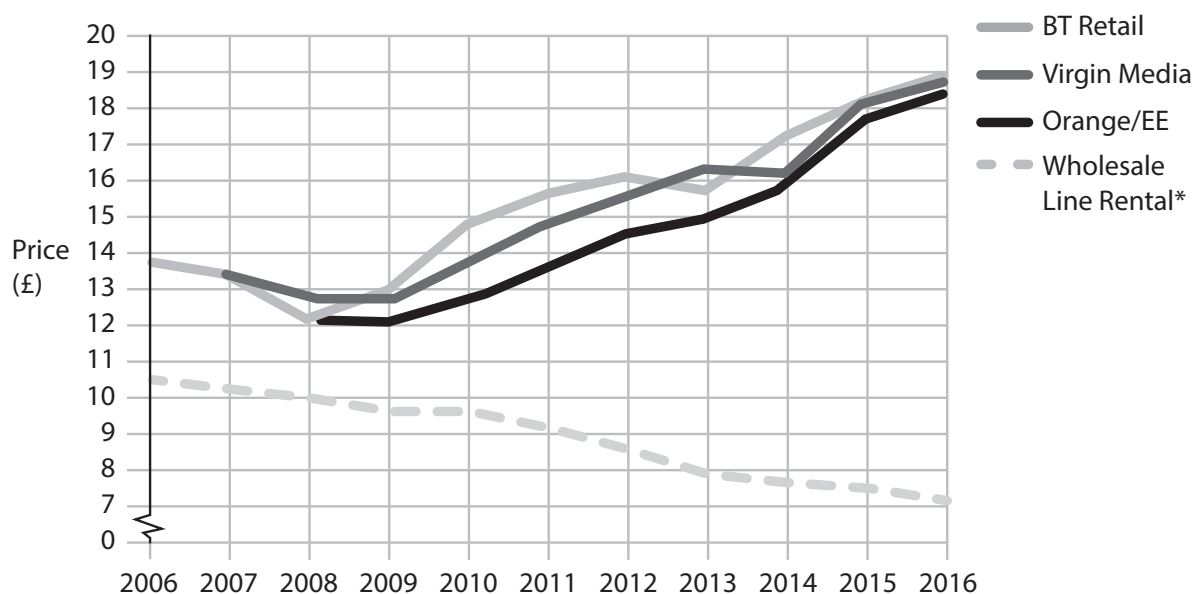
The Prime Minister recently said that the regulator Ofgem (Office of Gas and Electricity Markets) should limit electricity and gas suppliers' most expensive tariffs.

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. 5

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". 10

(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. 5

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. 10

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. 15 20

(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>)



(10)



This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins or other markings on the paper.



SECTION B

Read Figures 1 and 2 and the following extracts (A to C) before answering Question 6.

Write your answers in the spaces provided.

You are advised to spend 1 hour on this section.

Question 6**The UK online streaming services market****Figure 1: Market share of UK online streaming services**

	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022
Amazon Prime Video	37.9%	41.1%	45.0%	27.1%	25.9%
Disney+	16.0%	17.7%	19.3%	14.1%	21.5%
Netflix	15.0%	10.5%	5.0%	9.4%	4.5%
NOW	11.3%	11.2%	5.6%	11.0%	11.1%
AppleTV+	4.0%	5.5%	7.3%	9.2%	9.9%
BritBox	4.0%	3.0%	5.7%	6.0%	5.9%
Others	11.8	11.0%	12.1%	23.2%	21.2%

(Source adapted from: Kantar, Worldpanel Division Geotech 2022)

Figure 2: UK online streaming services – monthly fees

Streaming service provider	September 2022
Netflix premium (4 users/ultra HD*)	£15.99
Netflix standard (2 users/HD)	£10.99
Netflix basic (single user/non HD**)	£6.99
Amazon Prime Video	£8.99
Amazon Prime Video – Student price	£4.49
Disney+	£7.99
AppleTV+	£4.99

*This is the highest quality picture currently available

** This is the basic quality picture

(Source adapted from: <https://www.radiotimes.com/tv/what-to-watch-tv/best-streaming-service-uk/>)



Extract A**How Netflix makes use of behavioural science**

In the last few years, companies have been trying to find ways to attract the attention of customers. Various streaming platforms such as Netflix, Amazon, and YouTube use 'nudges' to influence consumer behaviour. The 'next-up' feature on Netflix or 'auto-play' on YouTube has been subject to research that relates it to binge-watching. Binge-watching is the practice of viewing for a prolonged period, multiple episodes of a TV show or several films in rapid succession. 5

Similarly, the policy of offering a one-month free subscription under the label of 'free trial' requires credit card information to turn the forgetful subscriber into a potential paying one. Following this strategy, Netflix has expanded to 190 countries in just seven years and according to the Wall Street Journal, the company generated total revenue of over \$5.2 billion in 2019, which was an increase from 2018 of around \$4 billion. 10

However, 2022 data shows that consumers, increasingly worried about the rising cost of living, are turning their back on Netflix. With a reported cancellation of over 200 000 subscriptions in the first quarter and another two million forecast to leave by the end of the year. Subscribers are rethinking their commitment to the streaming services that grew their numbers sharply during the home-based months of the global health crisis. Netflix subscribers have also quoted a decline in value for money and satisfaction with the quality of the shows as key motives for cancellation. 15

Disney now see higher satisfaction rankings than Netflix across the quality of shows, amount of original content, number of new-release films, variety of classic films and amount of kids' content. Forecast cancellation rates for Disney+ fell to an all-time low of 3.2%. 20

(Source adapted from: <https://www.novanudge.com/post/sludge-on-demand-how-netflix-makes-use-of-behavioural-science>
<https://www.theguardian.com/media/2022/apr/20/netflix-shares-fall-losing-subscribers>)

Extract B**The economics of price discrimination**

Throughout 2022, Netflix, a 100-billion-dollar company, increased prices in the US, Canada, the UK and Ireland (most of which saw similar price increases in 2021, too). In sharp contrast, Netflix recently announced it was reducing its prices in India (standard/2-user 499 rupees a month, equivalent to £5.42) in a bid to compete with Disney+ and Prime. 5

UK students currently enrolled in a college or university who have a valid student email address can join Prime Student through the Amazon website. This gives them nearly 50% off a standard Prime membership and many other exclusive benefits.

(Source adapted from: <https://help.netflix.com/en/node/24926/in>)

Extract C**Educational Website and TV Programmes**

BBC Bitesize is a learning platform created by the BBC in 1998. The online study resource allows parents to teach their children from home, using ready-made lesson plans and study guides with questions for all ages. The revision sessions are free to watch and they are available for children aged five up to their late teens. The guides are written by teachers and subject experts, so they are reliable and follow the National Curriculum. Last year Bitesize attracted around two million weekly unique browsers with a peak week of 3.3 million in the GCSE exam period. 5

Oak National Academy is a freely available learning resource website created for pupils aged four to sixteen. Launched in 2020, as a response to the global health crisis, the website includes lesson slides, video lessons, worksheets, and quizzes conforming to the national curriculum in England. Ministers have set aside £43 million to fund the Oak National Academy over the next three years. 10

(Source adapted from: <https://www.bbc.co.uk/bitesize/articles/zmjdhbk>
<https://www.structural-learning.com/post/oak-academy-a-teachers-guide#:~:text=Oak%20National%20Academy%20is%20a,the%20national%20curriculum%20of%20England>)



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SECTION B

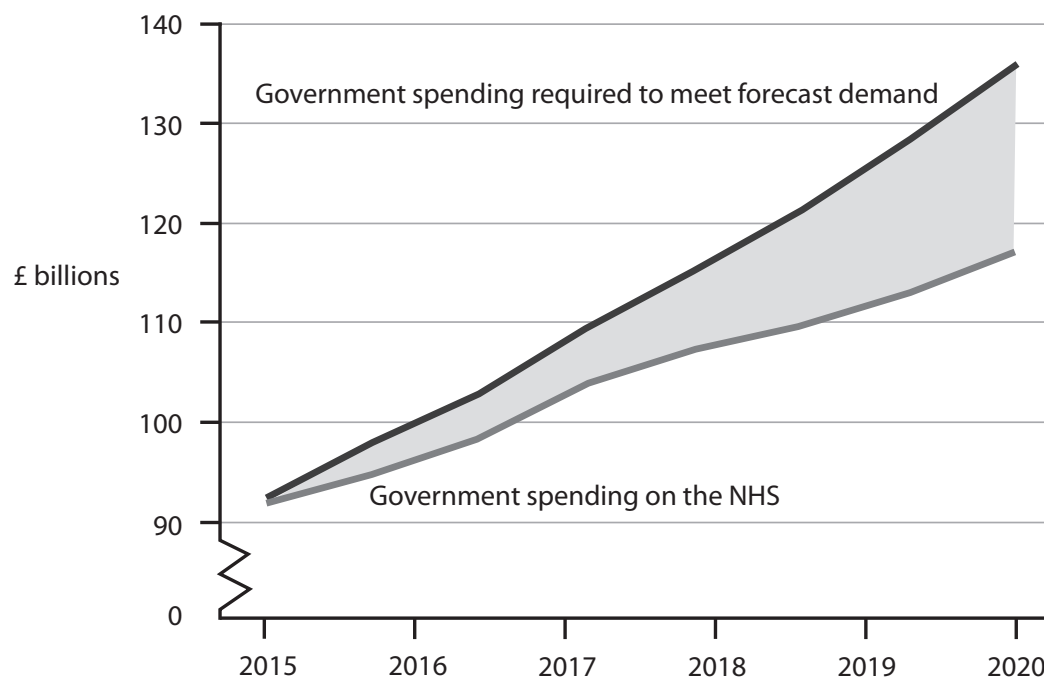
Read Figure 1 and 2 and the following extracts (A to C) before answering Question 6.

Answer ALL Questions 6(a) to 6(e) and EITHER Question 6(f) OR Question 6(g).

You are advised to spend 1 hour 5 minutes on this section.

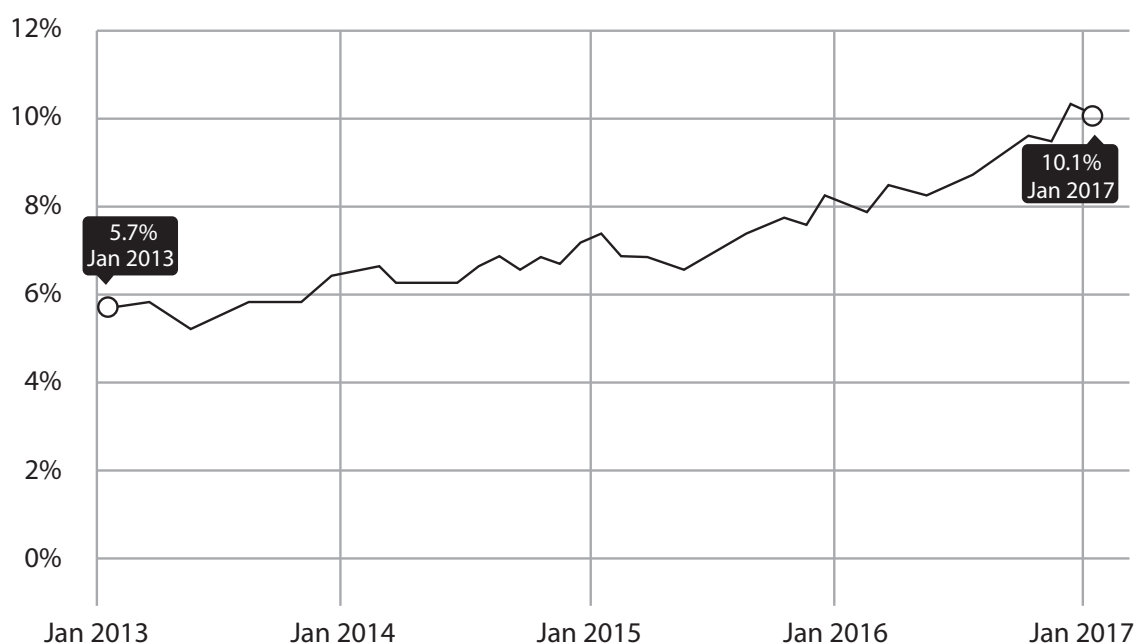
Question 6**Health provision**

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.

5

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.

10

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. 5

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. 10

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. 15

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. 20

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. 25

(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. 5

(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/>) 10



(20)





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(Total for this part = 20 marks)

216

MARK SCHEMES

official mark schemes



Question Number	Answer	Mark
2(a)	Knowledge 1 Knowledge/understanding 1 mark for definition of external benefits e.g. • Positive externality (1) • When the social benefits of an economic action are greater than the private benefits (1) • External benefits = social benefits – private benefits (1) • Benefits accruing to a 3rd party (1) • Spillover effects (1) • Outside the price mechanism (1)	(1)

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

Question Number	Answer	Mark
2 (c)	Application 2 Identify welfare gain area VTR (1) Annotate or identify the social optimum output as Q_1 or R or S (1) © Learnogic	(2)

Question Number	Answer	Mark
3 (a)	C	(1)

Question Number	Answer	Mark
3(b)	Knowledge 1, Application 2 Knowledge One mark for identifying measure e.g. • tax on water or water consumers (1) OR • regulation (1) OR • subsidise water efficiency or substitute water provision to lake (1) OR • permits (1) Application 2 marks for linked application (1+1), e.g. • increased taxes/regulation would make it more expensive/less profitable (1) reducing consumption (1) • diagram e.g. showing supply shifting in (1) and quantity falling (1)	(3)



Question Number	Answer	Mark
4(a)	Knowledge 1, Application 1, Analysis 1 Positive statements are value free/ based on facts/ can be verified and/or Normative statements contain value judgements/ not based on facts/ cannot be supported with evidence (1) The reference to 'should' in the statement suggests it is normative as this is a person's value judgement or vaccination can be good for an entire population (1) The idea that those who are not vaccinated will benefit is a positive statement as evidence will exist that shows others will benefit from others being vaccinated or if enough of its members are vaccinated, even those who are not will receive a measure of protection (1)	(3)

Question Number	Answer	Mark
4(b)	The only correct answer is C A is not correct because this is government failure B is not correct because this is the incentive function of the price mechanism D is not correct because this is the rationing function of the price mechanism	(1)

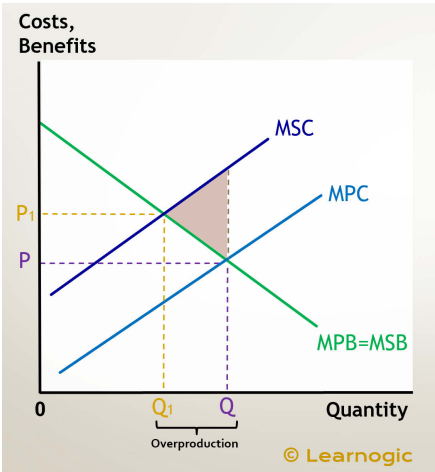


Question Number	Answer	Mark
1(b)	Analysis 1 The only correct answer is A <i>B is not correct because both consumer surplus and producer surplus decrease</i> <i>C is not correct because producer surplus decreases</i> <i>D is not correct because consumer surplus decreases</i>	(1)

Question Number	Answer	Mark
2(a)	Knowledge 2, Application 2 1 mark for the original market equilibrium where $MPB = MSC$ (=MPC) 1 mark for correct shift from MPB to MSB 1 mark for showing the external benefit V to T 1 mark for welfare gain identified VRT 1 mark for the new equilibrium identified where MSB equals MSC (R) or (S) or Q2 Social Optimum. Diagram required e.g.	(4)

Question Number	Answer	Mark
2 (b)	Analysis 1 The only correct answer is C <i>A is not correct because an external benefit to a third party is not identified</i> <i>B is not correct because an external cost to a third party is not identified</i> <i>D is not correct because a private cost plus external cost to a third party is not identified</i>	(1)

Question Number	Answer	Mark
3 (a)	Knowledge 2, Application 1, Analysis 1 Knowledge and Application 1 mark for understanding of pollution permits (1) 1 mark for appropriate linkage to industry/market/firms (1) 1 mark for how reducing permits reduce pollution (1) Award use of diagrams, for example: shifts the supply of permits inwards (1) which will push up the price per permit (1) OR Negative externality reduced Analysis: 1 mark for linked development of market incentives/government revenue e.g. Reducing pollution/Increase in price of permits (1).	(4)

Question Number	Answer	Mark
3 (a)	Knowledge 2, Application 2 1 mark for the correct labelling of MPC, MSB and/or MPB 1 mark for correct shift from MPC to MSC, divergent or parallel 1 mark for showing the external cost at market output Q ($MSC > MPC$) 1 mark for the new social optimum equilibrium (Q_1) identified where MSC equals MSB (Q_1) or overproduction 1 mark for welfare loss/gain identified 1 mark for quantity of waste water treatment Diagram required e.g. 	(4)

Question Number	Answer	Mark
3(b)	Analysis 1 The only correct answer is C A not correct because the fine will increase efforts by the firm to reduce illegal discharges B not correct because the fine will increase costs and reduce profits D not correct because the intervention will not result in a net welfare loss.	(1)



Question Number	Answer	Mark
1(a)	Knowledge 2, Application 2, Analysis 1 Knowledge and analysis Up to 3 marks for: - the meaning of externalities, e.g. effect on third party, outside the transaction, difference between social cost and private cost (1). Points might include: - use of plastic which is hard to recycle/other single use plastic arguments (1) - HFSS food can cause obesity and have third party effects (1) - more congestion/air pollution from food deliveries (1) (positive) externality due to rise in productivity generated by cash rich, time poor professionals might allow people do impact third parties positively (1) Application: 2 marks for data (1+1 or 2): 1.4 billion containers (1) or other plastic items to allow food to travel safely e.g. heat retention (1) - over-consumption / order more food (1) e.g. impact on other NHS users (1) - HFSS food (1) - falling profit margins (1) or increased competition in food delivery might mean wages fall so fewer wider macro benefits (1) - don't even have to get up/lack of exercise of consumers ordering from their sofa (1) NB 2 marks may be awarded for a diagram e.g. a negative externalities in production of food that has to be delivered	(5)



Question Number	Answer	Mark
1(a)	Knowledge 2, Application 2, Analysis 1 Knowledge and analysis (3) e.g. • Understanding of social optimum quantity (1) • Imperfect / asymmetric information (1) means that consumers are not aware / do not perceive actual benefits (1) • Irrationality (1) leads to: • habitual consumption of unhealthy foods (1) • herd behaviour/influence of others/impact of advertising (1) • weakness at computation (1) • Positive externalities (1) • Cost of living crisis (1) reduces purchasing power /choosing cheap foods (1) • Supermarket promotion of low-cost products/unhealthy food is cheaper (1) so more affordable than healthy food (1) • Social trends e.g. convenience (1) choose packaged and processed options which are less healthy (1) • Lack of government intervention (1) • Consumers are unaware that the cheaper food is unhealthy (1) and therefore make their decisions on perceived benefit rather than actual benefit (1) Application (2) e.g. 2 marks for data (1+1 or 2): e.g. • Reference to BOGOF/ 3 for 2 in Extract A (1) • Extract A – consumers face heavy marketing for unhealthy foods (1) • Advertising and online promotion affect people so they seem to behave irrationally (1) • The restrictions banning HFSS adverts on TV before 9pm and paid-for adverts online were set for January 2024 (1) • Government rules limiting the location of unhealthy foods in shops began in 2022 e.g. checkouts and store entrances (1) • Own examples of external benefits and brand behaviour (1) NB Maximum 2 marks for an effectively used diagram, as any of knowledge, analysis or application.	(5)



Question Number	Answer	Mark
6(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
6(d)	Knowledge 2, Application 2 Formula for percentage calculation (new-old)/old x 100. (1) $(102357 - 45418)/45418 \times 100$ (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
6(b)	Knowledge 2, Application 2 Analysis 2 Knowledge/understanding Identification of two separate external benefits e.g. • Provision of unbiased information (1) • High quality programmes (1) • Educational benefits (1) • Reduce information gaps in markets (1) Application 2 marks for, e.g. • ‘to provide impartial news and information’ (1), • ‘to show the most creative, highest quality and distinctive televised content’ (1) • ‘to support learning for people of all ages’ (1) • ‘quality programming’ (1) • ‘content for minority groups’ (1) Analysis Linked development of why public service broadcasting creates external benefits e.g. consumption of public service broadcasting (1) raises educational levels which are expressed in terms of higher productivity and are manifest in higher wages, profits and per capita GDP (1) Award up to 3 marks for each external benefit	(6)



Question Number	Answer	Mark
1(b)	Knowledge 2, Application 2, Analysis 2, Evaluation 2 NB an answer might provide positive externalities as KAA and negative externalities as evaluation NB do not award effects on copper mining firms, unless an indirect effect. NB an answer which does not relate both to firms and communities is limited to 5/6 KAA marks. NB do not award externalities themselves, e.g. pollution, the environment. Award the <i>impact</i>. Knowledge and Analysis Knowledge/ implicit understanding of externalities (1) e.g. knowledge that externalities are an effect on third parties, or outside (or not accounted for by) the market mechanism, or the difference between private and social costs or benefits Firms (in businesses other than mining) Points showing the impact on firms might include: • farms lacking water because mining companies are using it (1+1) • high demand for energy means that other firms will face high energy costs (1+1) • high exchange rate can cause problems for other exporting firms (1+1) Communities Points showing the impact on communities might include: • problems of water access for households (1+1), • large-scale transport causes noise, air pollution (1+1), • people have to move away to find work (social dislocation) (1+1) • impact on employment and incomes as mining declines (1+1) • impact on firms that supply the mining sector (1+1) Some impacts could be seen as firms and communities, e.g. impact on wider economy of higher wages as firms have to compete with unionised highly paid copper miners for employment. Application:	

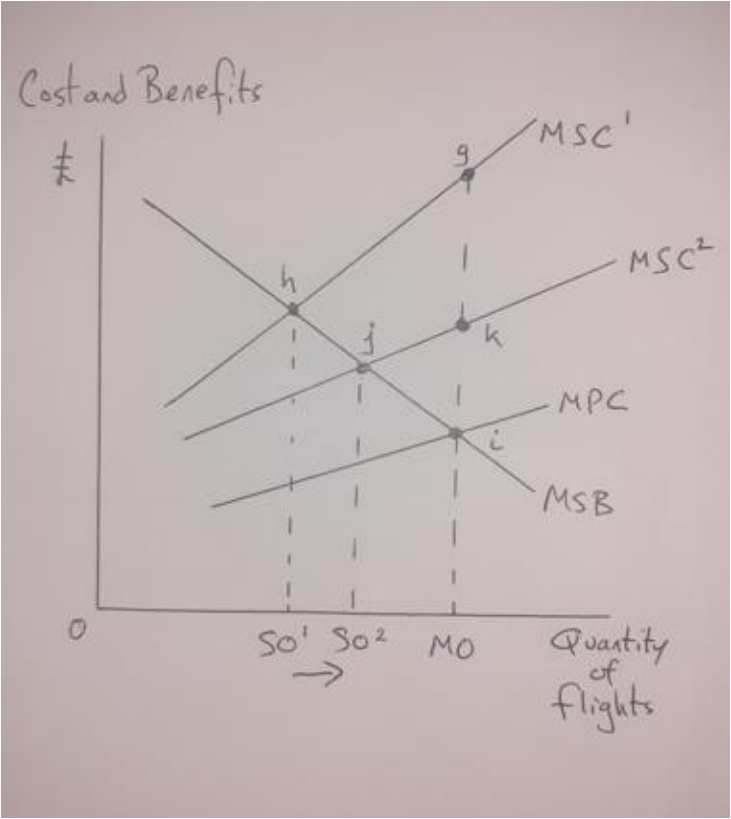


	• Externality diagram illustrating negative or positive impact using marginal analysis (up to 2 marks: 1 mark for correct MSC and MPC drawn, 1 mark for correct equilibrium shown/deadweight loss) • Water has to be pumped 200km (Extract B paragraph 4) which uses fossil fuels/is noisy/ugly/affects tourist areas • Mines are deeper and use more fuel (carbon emissions have impact on climate and therefore on welfare of many) • Desalination plants might affect other firms or consumers (this might be negative or positive) Evaluation (2 marks for any relevant point, two points 1 +1): • Positive externalities, e.g. ○ impact of local multiplier on economy, improved infrastructure affects other industries ○ Improved wages and working conditions for workers (in businesses other than mining) ○ The copper mining has already helped to fund improvements in welfare, such as the financial system and pensions ○ Benefits of higher value of currency, e.g. terms of trade improvement • Difficult to know how large the externalities are or who is bearing the cost • The benefits might outweigh the costs, e.g. reduction in poverty, improved fiscal powers, strength of financial markets, improved local infrastructure • Other standard evaluation points, e.g. Extract B a drought has made the problem more severe, time to acquire environmental impact assessments (Extract B paragraph 5) might not be a reliable indicator	
		(8)



Question Number		Mark
1(c)	Knowledge 2, Application 2, Analysis 2, Evaluation 2 Knowledge (1+1) e.g. • Fall in consumption of non-renewable products (1) • Rise in tax revenues (1) • Reduction in external costs/greater environmental awareness (1) • Soft touch regulation/allows consumer choice (1) Application (2 or 1+1) e.g. • Use of reusable cups as a means of reducing demand for disposable cups (i.e. a substitute, Extract C) (1) • Extract B – 5p charge is a small proportion of £2.60 (1) • 85% reduction in plastic bags (1) • This might be illustrated through the use of a correct supply curve shift, e.g. a fall in consumption or production of cups on x axis (1) Analysis (1+1) e.g. • Indirect taxes may raise prices (1) • Increases in costs of production (1) • Link between unit tax, tax revenue and reduction in demand for cups (1) • A supply and demand diagram showing an indirect tax (supply shift upwards/leftwards) or an externalities diagram might be used (1) • tax revenue could be used to subsidise other products, e.g. recyclable cups (1) Evaluation (2 marks for any relevant point or 1+1). Points might include: • It depends if the tax is passed on to the consumer • Other policies may be considered e.g. new recycling specialist facilities, regulation • PED might be used, e.g. a 5p tax on the price of a £2.60 coffee might have very little effect on demand, or, a cup of coffee may be a small percentage of consumer income, depends on the availability of substitutes • Regressive nature of the tax – has a greater effect on lower incomes • Other approaches considered, e.g. subsidising reusable cups as in Ext B changing the technology in the recycling NB award two advantages. A diagram can be credited as analysis or application (1+1) up to 2 marks in total.	(8)



Question Number	Answer	Mark
6(b)	Knowledge 2, Analysis 2, Application 2, Evaluation 2 Knowledge/understanding: 2 marks (1+1) e.g. • Social optimum is when $MSC = MSB$ (1) • Social optimum position moves right (1) • Market equilibrium output (e.g. MO) position identified (1) • Downward sloping MSB (1) • $MSC = MPC + MEC$ (1)  Analysis: 1 mark for linked explanation of each identified benefit (1+1) e.g. • Third party effects are lower (1) so external costs are lower/MEC falls (gi to ki) (1) • MSC shifts/skews right (1) showing new social optimum position ($MSB = MSC$) (1) • Welfare loss falls (1) from ghi to kji (1)	

	Application: 2 marks for reference to Extract B e.g. • Thomas Cook airline emissions are lower/switch fuel types/new engines (1) • In 2018 Thomas Cook Group Airline was included in the top 10 of the world's most fuel-efficient airline (1) • Lower insurance bills/clean up bills for companies/households at risk of flood damage/storms (1) loss of cattle/crops due to drought declines (1) • CO₂ emissions per passenger declines (1) quantity of flights increases (1) NB These application points may be annotated on the diagram. Evaluation: 2 marks for two evaluative comments, OR 2 marks for identification and linked development of one evaluative comment e.g. • Difficulty in measuring size of negative externality (1) third party effects (1) • CO₂ emissions from travel agents, hotels and holiday activities increase/remain high (1+1) • Computational problems in measuring CO₂ emissions from planes (1) faulty industry data (1)	(8)
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1(b)

Knowledge 2, Application 2, Analysis 2, Evaluation 2**Knowledge/analysis: up to 4 marks e.g.**

Knowledge of externalities/external cost e.g.

- Externalities are an effect on third parties (1)
- Outside the market mechanism (1)
- Social costs greater than private costs (1)

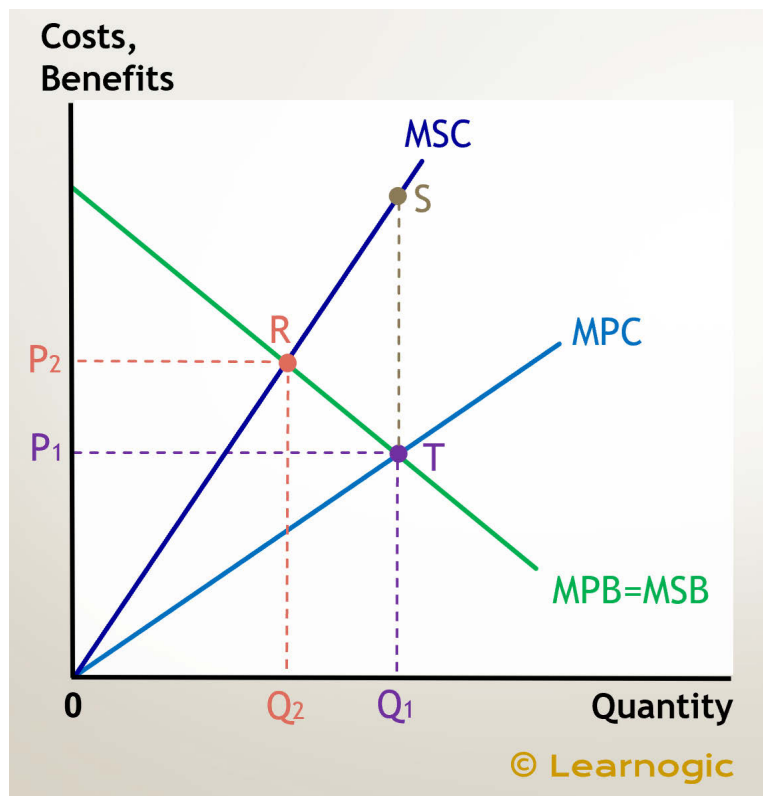
Identification of welfare loss occurring (may be shown on diagram, in addition to up to 2 marks for a correct diagram) (1)

1 mark for a likely externality, e.g.

- Air pollution (1)
- Impact on health of population (1)
- Climate change (1)

2 marks for diagram (may be awarded as K, An, or App)

1 mark for correct MSC and MPC drawn, 1 mark for correct equilibrium shown/deadweight loss)



NB If candidate does not draw a correct diagram the maximum KAA mark is 4/6



Question Number	Answer	Mark
6(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
6(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	Indicative content	Mark
1 (c)	Knowledge 2, Application 2, Analysis 4 Knowledge/implicit understanding: Policies identified might include: • Indirect tax/charges • Ban or other regulation • Free bags/nets or other state provision • Fines • Behavioural economics policy Application: • Tax or charge on each item. Might be illustrated through a specific tax diagram or similar. • Ban in some parts of Turkey for specific types (carcinogenic black bags). Might be supported by a limit on supply diagram. • Fines for consumers and retailers in some parts of Turkey • Free bags/nets or other state provision in e.g. 20 000 in Corlu near Istanbul • 950 tonnes of plastic waste Analysis: • Explanation of process linking the intervention to the reduction in use of bags. • This might be shown through a diagram(s).	(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.

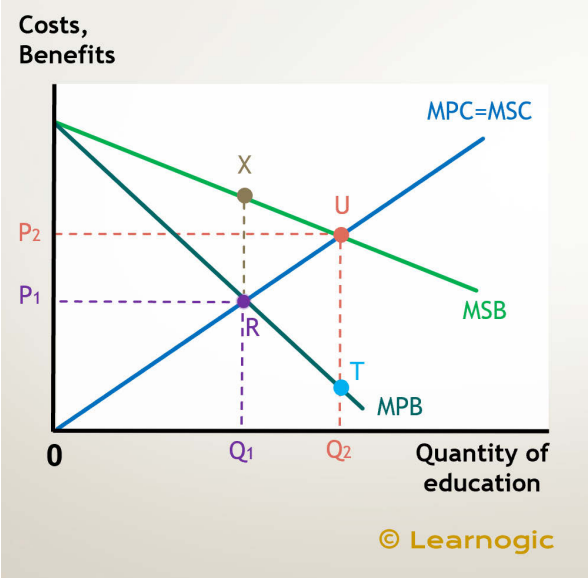


Question Number	Indicative content	Mark
1 (c) continued	Evaluation 4 - Charges work in other countries, e.g. UK - Emerging economies/countries might have more problems facing the cost of interventions e.g. inequality issue, poverty - The problem is much wider than plastic/single use bags, and the interventions will only affect a few on-street purchases - Likely to succeed because it taps into the social conscience of consumers and even a small charge may have a dramatic impact as in the UK - The tax/charge makes up a small proportion of income so many have minimal impact. PED is very inelastic/close to zero - Unintended consequences: e.g. multiple-use/ bags for life often contain more plastic and unless used many times can be more environmentally damaging - First paragraph suggests they are everywhere so given habitual behaviour people may continue to use them despite charges/ tax - opportunity cost of giving away 20 000 bags in a month – is this socially efficient?	(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.



	consumers' cost of living rising. Consumers are now forced to make a choice due to a lack of affordability. (1)	(8)
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Question Number	Indicative content	Mark
6(d)	Knowledge 2, Application 2, Analysis 4 - Understanding of private benefits and external benefits (may be implicit) - Explanation of private benefits gained from watching educational programmes: satisfaction from watching, improved progress at school, GCSE and SATs success, career development, higher earnings potential, less need to buy expensive revision guides, less requirement for private tutors, and increased consumer surplus - Two million weekly unique browsers - Peak use of 3.3million in GCSE exam period £43 million to fund the Oak National Academy - Written by subject experts - Explanation of external benefits: skilled workforce, higher productivity, increased potential output, greater innovation, and wider third party effects - Diagram depicting private and external benefits e.g.  © Learnogic - Identification of market equilibrium (Q1) and social optimum (Q2) - Identification of triangle of welfare gain RXU - Identification of the external benefit (UT) - Equation showing $MPB + MEB = MSB$ NB: For KAA L3 candidates must refer to a private and an external benefit	(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
6(d) continued	Evaluation 4 • Difficulty in measuring any monetary value to private benefit and external benefits • Time lag before both private and external benefits are seen • Cause and effect - many other factors influence the state of the UK workforce, competitiveness etc. • Government policy change/funding changes could offset any benefits • The production of television programmes could cause negative production externalities which offset the benefits, e.g. power consumption, manufacturing of devices • Wider social problems by encouraging children to spend more time on electronic devices e.g. obesity and addiction to online activity • Oak National Academy was created as an alternative to face to face education - so no additional education was necessarily consumed • Cost and opportunity cost issues e.g. £43 million expenditure • Greater significance during home schooling/ online provisions • Questioning effectiveness of online learning	(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
6(e)	Knowledge 3, Application 3, Analysis 3 Policies may include: • Increase investment in training programmes to raise quantity and quality of human capital and productivity / increase provision of modern apprenticeship schemes / it may involve government subsidies or tax breaks to firms. • Recruit skilled workers from overseas via careers fairs and trade journals / provides a ready supply of labour. Accept policies referring to geographical mobility of labour if linked to the energy sector. • Change industry image so it appeals to more female school leavers and graduates – this may involve restructuring of careers advice / marketing programmes and information on career paths and opportunities. • Retain ageing workforce by improving working conditions and rates of pay / offer flexible working hours and part-time work / raise state retirement age; older workers have higher levels of human capital and so productivity could be increased. NB: For Level 3 response candidates must refer to at least one business policy and one government policy. NB: For Level 3 response candidates must refer to the energy sector.	(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
6(e) continued	Evaluation 6 • Training programmes involve (opportunity) costs to businesses and government / time period to train labour, especially in higher order technical skills / quality of training programmes. • Recruitment of skilled workers from overseas may create problems such as access to UK jobs following Brexit decision / language barriers / differences in qualifications and skills to those required / possibility of higher staff turnover if overseas workers intend to return home / family ties and high house prices may create geographical immobility of labour. • Changing energy sector image may require high levels of marketing expenditure / some jobs may not suit parents with family commitments. • Retain older workers could lead to problems of poor health and low productivity and ability to learn new tasks. Also the underlying skilled labour shortage remains – eventually older workers will retire. • Other policies to overcome labour shortage for example, new technology to substitute labour with capital, means that reducing labour immobility is not a priority.	(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.



6(e)	Knowledge 3, Application 3, Analysis 3 Government intervention to correct market failure – negative externalities of production Reduce overproduction – market output greater than social optimum Correct misallocation of resources – reduce welfare loss Reduce external cost/third party effects Government methods: • Indirect tax on electronic waste (specific) or on manufacturers of devices • Subsidies extending longevity of electronic items/ increase recyclable content • Provision of information/education – on electronic waste problems on packaging • Regulation – extending longevity of electronic items/ increasing recyclable content/fines for not recycling • Tradable pollution permits Reward relevant application e.g. candidates work out how much is not being recycled (700 000 tonnes) NB for a level 3 answer there must be at least one reference to Extract D and two methods NB reward relevant diagram	(9)
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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
6(e) continued	Evaluation 6 • Discussion of the effectiveness of the policies • Difficulty in measuring/quantifying and giving a monetary value to scale of negative externality/overproduction/external costs • Consideration of the price elasticity of demand and supply/difficulty in changing behaviours • Some initiatives have worked in the past e.g. the recycling rate for big appliances, such as fridges and cookers, is about 80% • Depends on technological advances e.g. may reduce waste from small appliances/re-use/longer life-span of products • Information gaps: Consumers ignore the electronic waste labelling • Government failure: Unintended consequences - illegal dumping of small electronic products is likely to increase • Government failure: Excessive administrative costs – targeting subsidies, imposing fines • Timescale e.g. improving new products will take longer than recycling current items	(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.

Question Number	Indicative content	Mark
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Question Number	Indicative content	Mark
6(e)	Knowledge 3, Application 3, Analysis 3 Understanding of private and external costs <u>Private costs</u> Costs to firms to purchase capital machinery/ equipment to produce the plastic packaging/ products Costs to firms to purchase raw materials and inputs (derived demand) to produce the varieties of plastics required Consequently leading DWL and over-production of plastics beyond the social equilibrium of $MSC=MSB$ Extract B - Businesses manufacturing or importing 10 tonnes or more a year of plastic packaging that contains less than 30% of recycled plastic are taxed at £200 per tonne <u>External costs</u> Any costs incurred on a third party e.g. environmental costs, litter, damage to wildlife, use of plastic, CO₂ produced when manufacturing plastic, plastic micro-particles ending up in water system/ animals etc. Consequently leading to DWL and over production of plastics beyond the social equilibrium of $MSC=MSB$ Extract C – 25,000 tonnes of waste from single use cups / coffee from chains and cafes NB Level 3 responses must consider both private and external costs of the production of plastic	(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.

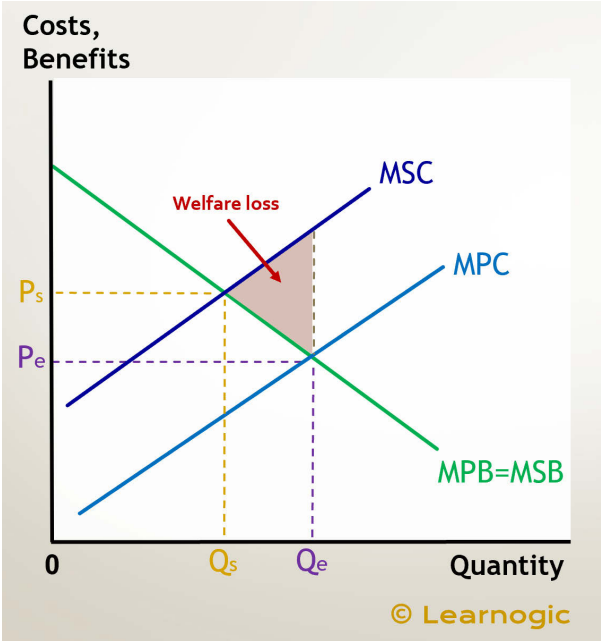
Question Number	Indicative content	Mark
6(e) continued	Evaluation 6 Points may include the following; - Increased recycling rates as a result of intervention such as taxes could reduce the implications for third parties/ external impact - Increased scale of production could limit the private costs to firms of packaging using plastic - Taxes can be applied (as in extract) to limit the external costs by increasing the cost/ price of plastic to firms and consumers - Estimation of the external costs is very difficult in terms of understanding the exact impact - Offset by benefits of plastic production in terms of protection of food and employment opportunities created - Impact of plastic pollution can fall on other countries/ economies and therefore external costs can be dispersed	(6)



	to other areas	
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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.



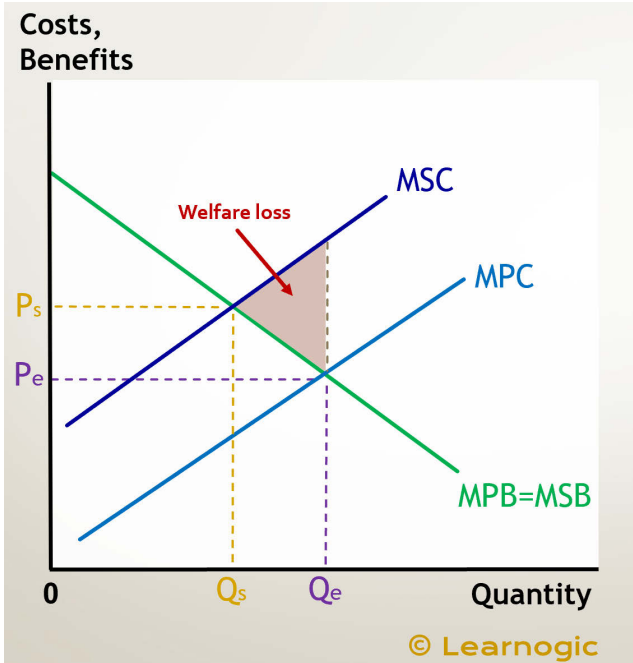
Question Number	Indicative content	Mark
6(e)	Knowledge 3, Application 3, Analysis 3 Understanding of private and external costs in production  NB Level 3 responses must consider the effects on both consumers and producers. NB If no valid diagram then the maximum of Level 2 may be awarded	(9)

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
6(e) continued	Evaluation 6 Details of the benefits of meat farming including; - Revenue/ profits to farmers - More sustainable farming methods limiting negative impacts - The ability to fund and support benefits to the environment including increased hedgerows and rewilding - Extent to which costs can be further mitigated	(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
6(f)	Knowledge 4, Application 4, Analysis 6  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)

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
6(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	Answer	Mark
6(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 above 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)

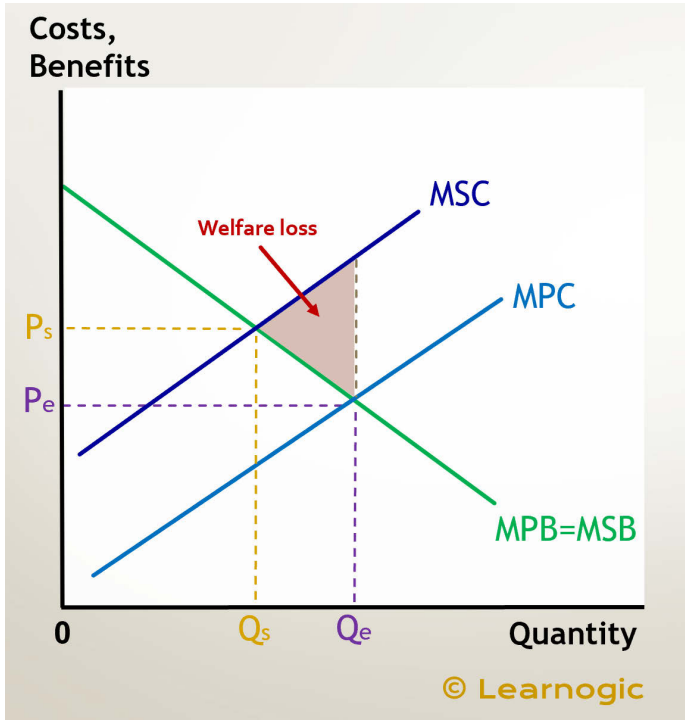
Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–3	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
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	Answer	Mark
6(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: ○ distortion of price signals ○ unintended consequences ○ excessive administrative costs ○ 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.



Question Number	Indicative content	Mark
6(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_s. 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.	
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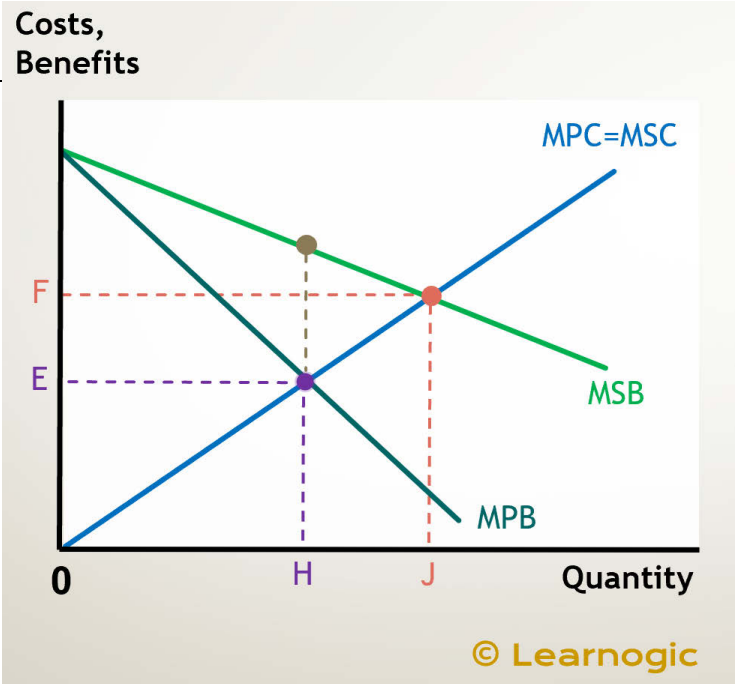
Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–3	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes 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
6(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
6(g)	Knowledge 4, Application 4, Analysis 6 The free-market approach to providing television content is based on subscription to paid services such as Netflix and advertising-funded commercial television stations Broadcasting has historically been provided publicly, financed through a mixture of television licence fees, appropriations from general taxation, and advertising Negatives with the free market approach; • Market provision leading to excessive advertising levels. Excessive advertising is an issue with commercial television • Under provision of resources to programming and whether these resources be used to produce appropriate programming • Left to the market alone there will be under-consumption of public service broadcasting. This can be illustrated through an externalities diagram: Costs, Benefits  □ 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 public service broadcasting	
		(14)

	□ The external benefits of public service broadcasting are social benefits that spillover to benefit others in the society and future generations. These are seen in the public purposes of the BBC's Charter □ Government intervention can be used to ensure that the optimum quantity of provision, J, is consumed rather than the free market outcome at H	
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Knowledge, application and analysis		
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	Answer	Mark
6(g) continued	Evaluation 6 Arguments in favour of the free market approach include: - Charging for usage allows content providers to improve the quality of their services. The ‘streaming wars’ are generating innovation and improved customer satisfaction - The greater the number of subscribers the more easily content providers can spread the costs of programming, leading to reduced prices - Greater efficiency when compared to public service provision	(6)
	Problems of public service broadcasting include: - There is a significant issue surrounding the funding of public service broadcasting. The five public purposes of the BBC’s Charter are expensive to fulfil. - Content is expensive to create. The licence fee is seen as problematic because it is a regressive form of taxation, with everyone paying the same fee regardless of their income - As technology develops, it become even harder to sustain a compulsory licence fee when people have moved predominantly to alternative sources of information through the internet, digital channels and smart phones	

Evaluation		
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
7	Knowledge 4, Application 4, Analysis 8 • Definition of a tax/ identification of an ad valorem tax. Economic effects include: • Increase in price and a reduction in demand for soft drinks which contain sugar / increase in demand for healthy drinks. • Reduction of consumer surplus and producer surplus/ profits (may be shown on diagram) • Tax acts to increase costs and may reduce profits. • Increased investment in healthier drinks. • Increase in tax revenue for government and impact on healthcare services and other services, for example dental care. • Improvements in quality of healthcare among population – fall in obesity, diabetes and heart disease. Reduced pressure on healthcare services. • A diagram of an indirect tax may be awarded, depicting an increase in price, a decrease in quantity and the area of tax collected. • A relevant externality diagram depicting a reduction in welfare loss. • A relevant cost and revenue diagram depicting the impact of an expenditure tax on firms. • Increase in life expectancy/ the quality of life/ productivity in the workforce. • Impact on employment in the soft drinks industry/impact on employment in substitute product markets. • Impact on income distribution / regressive tax Evaluation 9 • Significance of price elasticity of demand in determining impact on price, quantity, employment and tax revenue. • Consideration of the impact on substitutes/ application of cross elasticity of demand e.g. switch to healthier substitutes. • Consideration of the incidence of tax on consumers and producers. • Difficulty in imposing the tax – different soft drinks products with different sugar content. • Extent of hidden/informal market. • Time factor - long term implications for government funding of pensions and healthcare. • Consideration of price elasticity of supply e.g. the ability of producers to switch to healthier drinks.	(25)



Knowledge, application and analysis		
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.

Evaluation		
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.



Question Number	Indicative content	Mark
7	Knowledge 4, Application 4, Analysis 8, Evaluation 9 - Understanding of private costs and external costs (may be implicit). - Explanation of private costs in nuclear power station: purchase of land, machinery, construction of buildings, labour costs, security costs, raw materials. - Explanation of external costs: visual eyesore, impact on wildlife, impact on local property prices, air pollution, road congestion, risk of leak or contamination. - Diagram depicting private costs and external costs ➤ Original MPB / MSB and MPC curves ➤ MSC curve (accept a parallel shift of the MSC curve) ➤ Identification of market equilibrium and socially efficient quantity ➤ Identification of triangle of welfare loss NB: For a Level 4 response, candidates must include an accurate diagram and consideration of both private and external costs.	(25)

	Costs also include: • Risk from major nuclear plant failure. • Imperfect market knowledge: risk from incomplete technology for developing the nuclear reactor. • Risk from foreign ownership and control of major nuclear power station (funded and built by French and Chinese companies). • High price of electricity consumers will pay – above the market price. • Accept macro point e.g. long term income outflow on the balance of payments. Evaluation • Difficulty in measuring and attaching a monetary value to private costs and external costs. • Time lag in building plant – at least 10 years. • Government intervention may reduce size of external costs e.g. construction noise abatement measure. • Risk of government failure; some argue it could not withdraw from the Hinkley Point project without major loss of trade with China. • Accept macro point e.g. short and long run effects on the balance of payments. Significant private and external benefits from the project which offset costs and/or reduce welfare loss, may include: • Employment and income creation / positive multiplier effects at local, national and international level / French and Chinese firms view it as a first step to securing further contracts from around the world. • Increased security of energy supply for the future – some 7% of UK electricity for sixty years / given the closure of many coal power stations. • Diversify UK energy production and so spread risks from uncertainty on non-renewable sources	
	such as wind power and solar power. • Stable price of electricity for consumers for next sixty years. • Less damage to the environment / nuclear energy has low carbon emissions / easier for government to achieve internationally agreed carbon emission targets. • Extremely tight safety regulations to be imposed on the building and operation of the nuclear power station / one of the greatest safety regulations in the world.	



Knowledge, application and analysis		
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.

Evaluation		
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.



Question Number	Indicative content	Mark
7	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)
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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.



Question Number	Indicative content	Mark
1 (e)	Knowledge 4, Application 4, Analysis 8, Evaluation 9 16 marks for KAA, for effects of increased infrastructure spending Microeconomic effects may include: • Wages higher • Improved infrastructure affects firms e.g. businesses' fixed or variable costs fall as transport costs fall • Investment seen to boost business confidence, lead to further investment and spending within firms • External benefits/external costs associated with the project - especially given the size, number of runways and amount of traffic outlined in Extract C. • External economies of scale • Accept answers based on impact on costs and/or revenues if the building occurs in the private sector, with appropriate diagram Macroeconomic effects may include: • Redistribution of incomes • Outward shift of AD/injection (I or G) into circular flow (or further outward shift in AD) with multiplier effects, with macroeconomic impacts e.g. employment and incomes rising • AS shift right with a movement in capacity of the productive economy shown (Keynesian or Classical AS) • Fiscal loosening – effects of increased budget deficit if funded without increase in tax • Effects of a rise in tax, if linked to government decision to raise tax to fund the projects NB for a Level 4 response there must be micro and macro effect (s). Some factors could be seen as micro or macroeconomics, such as a rise in tax, increased FDI, redistribution and confidence. Up to 9 marks for evaluation. Points might include: • Opportunity cost of spending on infrastructure e.g. schools, or higher taxes, • Crowding out – financial or resource • Might be a white elephant project	



	• Depends on relations with EU/other countries as to whether the airport will reach full capacity • Depends on the size of the multiplier effect • Depends on the state of the financial sector • True costs not accounted for - externalities ignored • Large projects require a lot of coordination and getting behind schedule putting lives at risk. • Difficulty in placing value on external benefits and costs associated with the project	(25)
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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
8	Knowledge 4, Application 4, Analysis 8 Methods of government intervention may include: • indirect taxation - e.g. tax on petrol & diesel or new car sales • subsidies on public transport • subsidies on the development on electric vehicles • minimum prices e.g. on new petrol/diesel cars • maximum prices e.g. on public transport or electric vehicles • Emissions Trading Scheme on aviation but proposed extension to road transport • regulation e.g. ban on sale of petrol & diesel vehicles, vehicle emission checks, ban cars in certain areas, new builds to have charging points • road pricing schemes - congestion charges, low emission zones • improved public transport infrastructure • education & information schemes • further deregulation of public transport/creation of greater competition in markets • regulation by CMA of train operators to improve reliability of services/reduce prices • increase road tax/road tax incentives for low carbon emission vehicles • promotion of alternative forms of transport e.g. electric bikes, cycle lanes, car sharing, bus only lanes • incentives for working from home e.g. tax breaks • behavioural arguments NB: For Level 4 KAA candidates must refer to the transport market (cars, roads, public transport etc.) NB – AT LEAST TWO METHODS FOR KL4 as “methods” Evaluation 9 • Criticisms of the likely effectiveness of policies • Government failure • Inelastic PED arguments • Weak substitute/XED arguments • Asymmetric information • Regulatory capture • Time lags • Prioritisation arguments • Short run v long run arguments • Combination of policies required • Cost and opportunity cost arguments • Measurement issues • Administration & enforcement issues • Arguments surrounding the manufacturing of electric vehicles/battery charging/poor infrastructure • Behavioural arguments	(25)



Knowledge, application and analysis		
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.
Evaluation		
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.



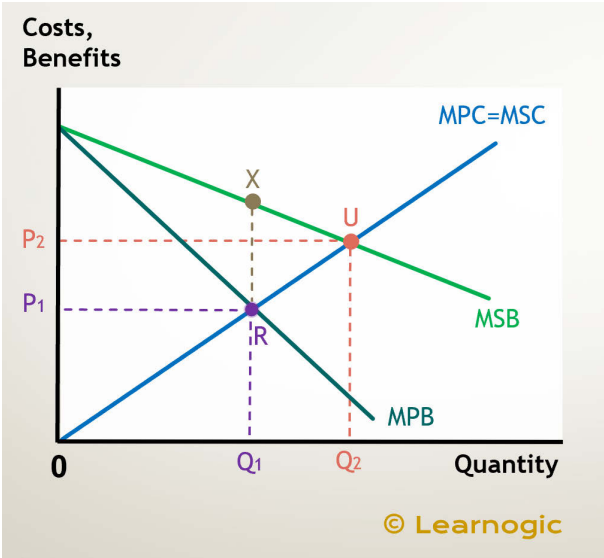
Question Number	Indicative content	Mark
7	Knowledge 4, Application 4, Analysis 8, Evaluation 9 Microeconomic effects could include: • Impact on firms' costs, revenue, profit (use of cost, revenue, profit diagram) • Impact on construction sector significant • Impact on labour markets e.g. geographical mobility of labour, labour market shortages, supply of labour in specific industries, demand for labour during construction, wage determination • Positive external benefits of less car travel • Employment/Wages - quicker transport e.g. for workers to access high paying jobs in London • Negative production externalities – private costs and external costs (use of diagram) • Accept price on y-axis, MSC may be parallel or pivoted • PPF and growth arguments • Impact on house prices Evaluation • Magnitude of the project - £100 billion is significant • Affordability arguments • Opportunity cost arguments • Government failure arguments	(25)

	• Time lags and implementation lags • Type of infrastructure project built • Conflicts between objectives – cost versus benefits • Difficulty in valuing external costs • People may not have the skills (e.g. financial) to get these jobs • Whilst quicker, transport costs could be prohibitive • Environmental offset may compensate for the loss from construction • Extensive use of tunnels minimises environmental damage NB Macroeconomic effects should be awarded at L2 maximum NB negative effects can be taken as KAA and positive effects as evaluation (and vice versa)	
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Knowledge, application and analysis		
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.

Evaluation		
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.



Question Number	Indicative content	Mark
8	Knowledge 4, Application 4, Analysis 8, Evaluation 9 Microeconomic effects could include: - Impact on firms' costs, revenue, profit (use of cost, revenue, profit diagram) - Impact on schools, colleges and universities particularly significant - Accept discussion of different funding models, with the Department for Education taking over role of the Education and Skills Funding Agency (ESFA) in March 2025. This previously funded education for learners aged 16 to 19-years-old - Impact on labour markets e.g. occupational mobility of labour, labour market shortages, supply of labour in specific industries, demand for labour e.g. maths teachers, wage determination - Increased skills so better employment prospects and higher wages/standard of living - Positive consumption externalities – private and external benefits - Use of diagram e.g. RXU is potential welfare gain, RX size of external benefit, etc.  - PPF and growth arguments Evaluation - Magnitude of spending - depends on how much	(25)

	spending on education is increased • Affordability arguments • Opportunity cost arguments • Some people are less suited to Maths and may struggle to make progress • People may be suited to focusing on other areas • Government failure arguments • Time lags and implementation lags – education takes a long time to have an impact, policies take time to be designed and implemented • Type of education included in the policy e.g. what level of maths • Conflicts between objectives – cost versus benefits • Difficulty in valuing external benefits • Impact on long-term size of labour force NB Macroeconomic effects should be awarded at L2 maximum NB negative effects can be taken as KAA and positive effects as evaluation (and vice versa)	
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Question Number	Answer	Mark
4(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 = $\% \Delta Q_d / \% \Delta Y$ 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)

Question Number	Answer	Mark
5(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
5(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
5(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)	



Question Number	Answer	Mark
1(a)	The only correct answer is C <i>A is not correct because it is a quasi-public good</i> <i>B is not correct because it is a public good</i> <i>D is not correct because it is a quasi-public good</i>	(1)

Question Number	Answer	Mark
1(b)	Knowledge 1 Application 1 Analysis 1 Knowledge and Analysis up to 2 marks e.g. Recognition that flood defences are public goods (1) • Non-excludable (1) • Non-rival (1) • Public sector provision funded by taxation is more effective (1) • Free rider problem (1) Application 1 mark e.g. • Government investment of £74m in the Calder Valley (1) • Individuals may refuse to pay but still use services leading to insufficient funds to build flood defences (1)	(3)



Question Number	Indicative content		Mark
6(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
6(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	Indicative content	Mark
6(c)	Knowledge 2, Application 2, Analysis 2 • Identification of broadcasting as a public good having the qualities of non-rivalry and non-excludability • Broadcasting is non-rivalrous because one person's consumption of the service does not interfere with another person's consumption • Broadcasting is non-excludable because a TV aerial or broadband router is all that is required to access services • Public service broadcasting such as the BBC is free-to-air funded partially by the TV licence • The marginal cost of providing a pure public good to an extra user is zero, and this implies that, in order to achieve allocative efficiency, the charge for the product should be zero • Private sector businesses are unlikely to consider providing pure public goods because they will not be able to make any profit at a zero price, and many consumers can take a free ride on such goods because of non-excludability	(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
6(c) continued	Evaluation 4 - Public service broadcasting faces enormous challenges as the industry experiences a technological revolution. Most of the UK's 25 million TV homes have access to multi-channel services such as Freeview digital terrestrial service. A large number have access to Sky TV, Netflix and the other subscription services - Digital broadcasters can now exclude non-payers using set-top boxes. The BBC and ITV broadcasting services continue to be completely non-rival and it is this that really matters in the context of the services that the BBC provides - Questioning the extent of the effect over time. How significant is this? - Possible perception that some paid for television content/ license fee cost means service is in essence regressive, excluding those on lower incomes - Quasi public goods as not fully non-excludable and also element of rivalry due to caps on sharing of accounts - 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	Indicative content	Mark
6 (g)	Knowledge 4, Application 4, Analysis 6 • Candidates may illustrate through use of appropriate diagram. • Public goods: non excludable and non rivalrous, e.g. flood defence schemes. • Failure of free market – free rider problem. • Externalities – positive or negative, e.g. housing may create these. • Information gaps: markets may have asymmetric information, e.g. insurance companies having incomplete information on risk of flooding. • Candidates may consider other types of government provision.	(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 chain 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
6(g) continued	Evaluation 6 • Unintended consequences. • Magnitude • Government failure, e.g. flood defences. • Opportunity cost of government provision. • Ineffectiveness of government provision, e.g. climate change – better to abandon areas, • Information gaps. • Non-beneficiaries pay. • Anti-competitive.	(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
4(a)	Knowledge 3 Application 1 Knowledge/understanding (3) 1 mark for e.g.: • Understanding of asymmetric information and information gaps • This is an example of market failure • Buyers and sellers have different levels of information • Seller knows the history of the vehicle • Buyer finds it hard to distinguish between a high quality and a low-quality vehicle • Prices and incentives to sell are affected • Risk of 'lemons' sees buyers, uncertain of quality, only willing to pay an average price for cars, discouraging sellers of high-quality cars from participating • Faults more costly to fix nowadays due to sophisticated electronics in cars • Many modern cars are more reliable so less of a problem • Allow use of a diagram to show information gap Application (1) 1 mark for e.g. • 750 000 consumers face unresolved problems • Older vehicles more likely to have faults • Increased risks to potential buyers • Own used car examples	(4)

Question Number	Answer	Mark
4(b)	The only correct answer is B A is not correct because firms tend to maximise profits C is not correct because this is an example of irrational behaviour D is not correct because this is an example of irrational behaviour	(1)



Question Number	Answer	Mark
6(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
6(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
6(d)	Knowledge 2, Application 2, Analysis 2 - Identification of information gaps as a cause of market failure Information gaps as main cause of food waste e.g. - Food suppliers lack market information: e.g. predicting size of harvests – dependent on climate/ pest control and disease/ time lags in growing crops and raising livestock. - Supermarkets lack market information: e.g. predicting household demand – depends on tastes and fashion which may change/ population and migration changes/ impact of competitors. - Consumers lack market information: e.g. uncertainty over how to store food or whether food is fit for consumption after sell-by dates. Irrational behaviour as main cause of food waste e.g. - Computation issues e.g. consumers perceived demand may exceed actual demand for food / difficulty in comparing the different size of food products to fit with the actual amount of food required. - Habitual behaviour e.g. consumers may have a tendency to purchase more food than required/ better to have too much than too little food. - Influence of other people's behaviour e.g. consumers may purchase food that they might not want. - Impulse buying e.g. due to advertising or use of special offers. NB These points could count as Evaluation and the Evaluation points as KAA. NB A Level 3 response would typically consider both 'information gaps' and 'irrational behaviour'. NB There may be overlap between information gaps and irrational behaviour as possible causes of food waste.	(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
6(d) continued	Evaluation 4 • Consideration of relative proportions of food waste e.g. supermarkets appear favourable compared to food suppliers and households. • Other factors could cause food waste e.g. ➤ Misleading advertising by firms so consumers purchase food they do not want. ➤ Transport and storage problems due to road congestion / problems of importing food from overseas. • Consideration of whether it is rational to assume that consumers seek to maximise utility in allocating their expenditure / and firms seek to maximise profits in making production decisions. • Long run information gaps may narrow and irrational behaviour may reduce e.g. improved labelling and social enterprise, advice to customers on how to store food and use leftovers or use of new technology to extend freshness of food. NB These points could count as KAA and the KAA as evaluation.	(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
6(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.
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
6(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
6(b)	Knowledge 2, Application 2, Analysis 2 • Understanding of rational behaviour e.g. utility maximisation • Consumers prioritising low prices (e.g. 'free trials') and better service • Consumers cancelling subscriptions due to decline in 'value for money and satisfaction with the quality of shows' • Consumers cancelling subscriptions due to cost of living concerns • Reported 200,000 cancelled subscriptions in the first quarter and another 2 million forecast to leave • Subscribers switching to Disney who has higher customer satisfaction rankings e.g. more original content and new release films. • Subscribers joining new streaming services during the global health crisis when less alternative forms of entertainment were available e.g. closed cinemas and restaurants NB: For Level 3 candidates must refer to Netflix subscribers NB: Netflix subscribers acting irrationally may be seen as KAA and then rational behaviour as 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.
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	Indicative content	Mark
6(b) continued	Evaluation 4 e.g. • Irrational behaviour by Netflix subscribers • Purchasing additional packages with similar services/little differentiation • Computational weakness - consumers failing to understand correct price plans and not understanding price changes • Habitual behaviour - regular direct debit that is paid regardless of usage, multiple subscriptions that aren't used, unaware of need to cancel after short term trial period • 'Forgetful subscribers' • Influencing by nudges e.g. 'next-up' and 'auto-play' features • Binge watching • Lack of information - may be on the wrong price plan	(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
6 (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.
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
6(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.	

