Please check the examination details below before entering your candidate information

Candidate surname	Other names
StemUp Model Solution	

Pearson Edexcel Level 3 GCE

Centre Number	Candidate Number

Monday 13 May 2019

Morning (Time: 1 hour 30 minutes)	Paper Reference **8EC0/01**

Economics A

Advanced Subsidiary
Paper 1: Introduction to Markets and Market Failure

You do not need any other materials.

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- There are two sections in this question paper.
- Answer **all** questions in Section A.
- In Section B, answer **all** of questions 6(a) to 6(e) and **one** question from 6(f) or 6(g).
- Answer the questions in the spaces provided
  – *there may be more space than you need.*

Information

- The total mark for this paper is 80.
- The marks for **each** question are shown in brackets
  – *use this as a guide as to how much time to spend on each question.*
- Calculators may be used.

Advice

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

Turn over ▶

P57194A

©2019 Pearson Education Ltd.

1/1/1/1/1/1

P 5 7 1 9 4 A 0 1 3 2

Pearson

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 Henry Ford designed his first moving assembly line in 1913, and revolutionised the car production process of the Ford Model T. This assembly line, at the first Ford factory, became the benchmark for mass production methods around the world.

(Source: adapted from https://www.ford.co.uk/experience-ford/history-and-heritage)

(a) The benefits of specialisation and division of labour are mostly associated with:

(1)

- ☒ **A** Adam Smith
- ☐ **B** Friedrich Hayek
- ☐ **C** John Maynard Keynes
- ☐ **D** Karl Marx

(b) Explain **one** advantage of the division of labour in car production.

(3)

Division of labour is where the production process is broken down into separate tasks, with each worker specialising in one particular task, such as fitting the tyres or the doors to a Ford Model T on the moving assembly line.

By repeating the same task, workers become quicker and more skilled, and no time is wasted moving between jobs. This increases labour productivity, so more cars are produced per worker per hour, lowering the unit cost of each car and allowing higher output for mass production.

(Total for Question 1 = 4 marks)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

BLANK PAGE

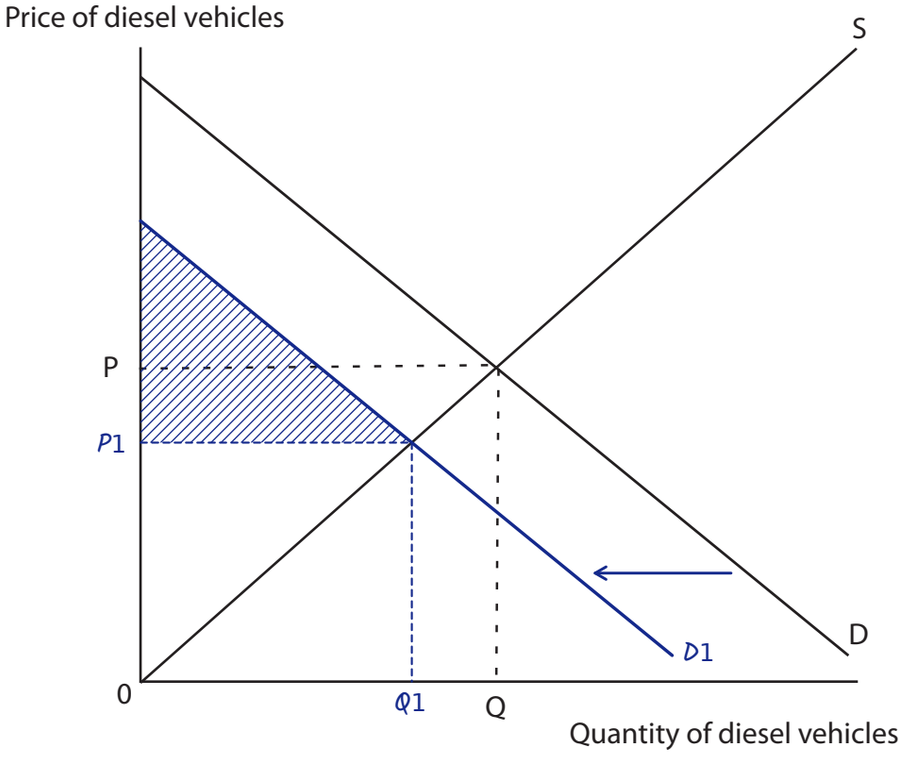
QUESTION 2 BEGINS ON THE NEXT PAGE.

2 The consensus that diesel emissions are bad for health has led to many cities planning to ban diesel vehicles from their centres. The mayors of Paris, Mexico City, Madrid and Athens have said they intend to ban these vehicles by 2025.

(Source: adapted from http://www.autoexpress.co.uk/car-news/consumer-news/98747/diesel-ban-clean-air-zone-expansion-could-see-diesel-cars-charged-to)

(a) Annotate the diagram to show the change in consumer surplus in the market for diesel vehicles, following the change in demand caused by the proposed 2025 ban in some city centres.

(2)



Demand shifts left from D to D1. Consumer surplus falls from the triangle above P and below D to the smaller hatched triangle above P1 and below D1 (new CS).

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

(b) A ban on diesel vehicles in city centres will reduce the demand for diesel fuel. This is because:

(1)

- ☐ **A** consumers are irrational
- ☐ **B** consumers expect the price of diesel to rise
- ☒ **C** the goods are complements
- ☐ **D** the goods are substitutes

(c) Define the term 'demand'.

(1)

Demand is the quantity of a good or service that consumers are willing and able to buy at a given price over a particular period of time.

(Total for Question 2 = 4 marks)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

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

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

(1)

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

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

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

(3)

Total revenue = price × quantity. 2016: £7.41 × 19.1m = £141.531m

%ΔQd = PED × %ΔP = −0.5 × 3% = −1.5%

New quantity = 19.1m × 0.985 = 18.8135 million tickets

New TR = £7.63 × 18.8135m = £143.547 million (about £143.5m)

(Total for Question 3 = 4 marks)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

BLANK PAGE

QUESTION 4 BEGINS ON THE NEXT PAGE.

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

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

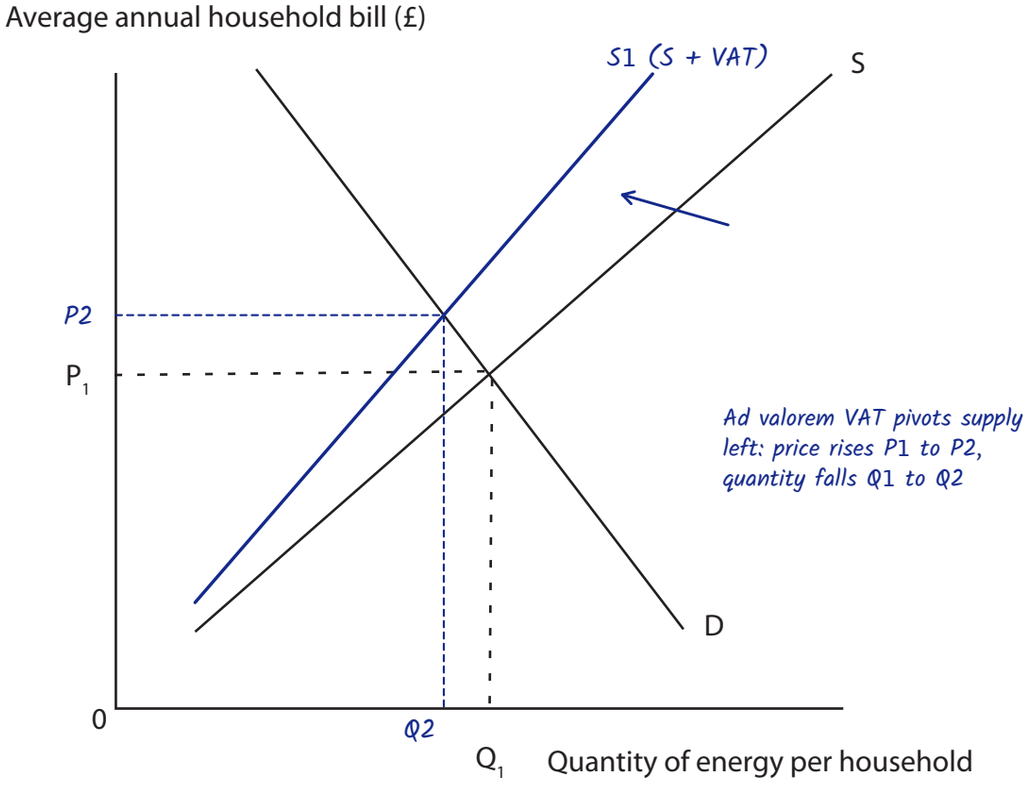
(a) The amount of VAT paid per year from energy bills by an average household in 2016 was:

(1)

- ☒ **A** £53.50
- ☐ **B** £214.00
- ☐ **C** £1 019.00
- ☐ **D** £1 123.50

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

(2)



DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

(c) Define the term 'indirect tax'.

(1)

An indirect tax is a tax on expenditure on goods and services, imposed by the government on producers, which is added to the price paid by consumers, such as VAT.

(Total for Question 4 = 4 marks)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

5

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

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

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

(1)

- ☐ **A** –0.8%
- ☐ **B** –2%
- ☒ **C** –2.5%
- ☐ **D** –25%

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

(3)

Income elasticity of demand (YED) measures the responsiveness of demand to a change in income. Freddos have a YED of –0.1, so they are an inferior good, with income inelastic demand.

Pocket money rose by 25% from £7 to £8.75, so demand for Freddos falls by 2.5%.

This means the producer's sales revenue will fall as children's incomes rise, so it should plan to produce fewer Freddos when incomes are growing and more when incomes are not growing.

(Total for Question 5 = 4 marks)

TOTAL FOR SECTION A = 20 MARKS

DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA

stemup.co.uk

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

BLANK PAGE

QUESTION 6 BEGINS ON THE NEXT PAGE.

SECTION B

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

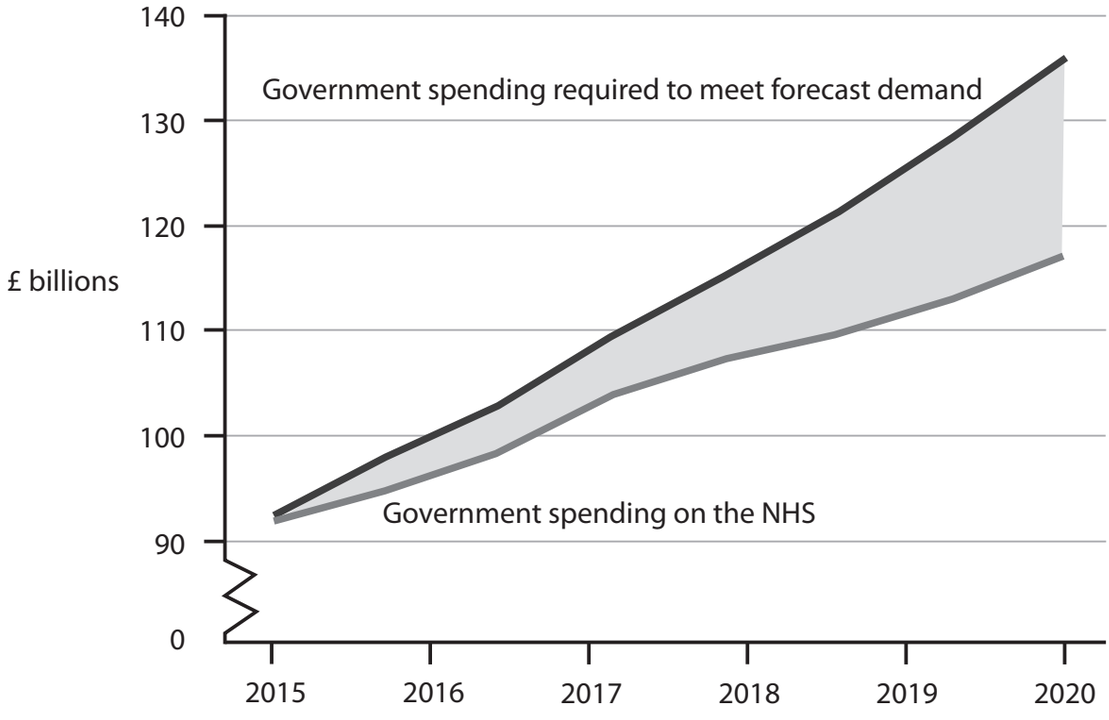
Answer ALL Questions 6(a) to 6(e) and EITHER Question 6(f) OR Question 6(g).

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

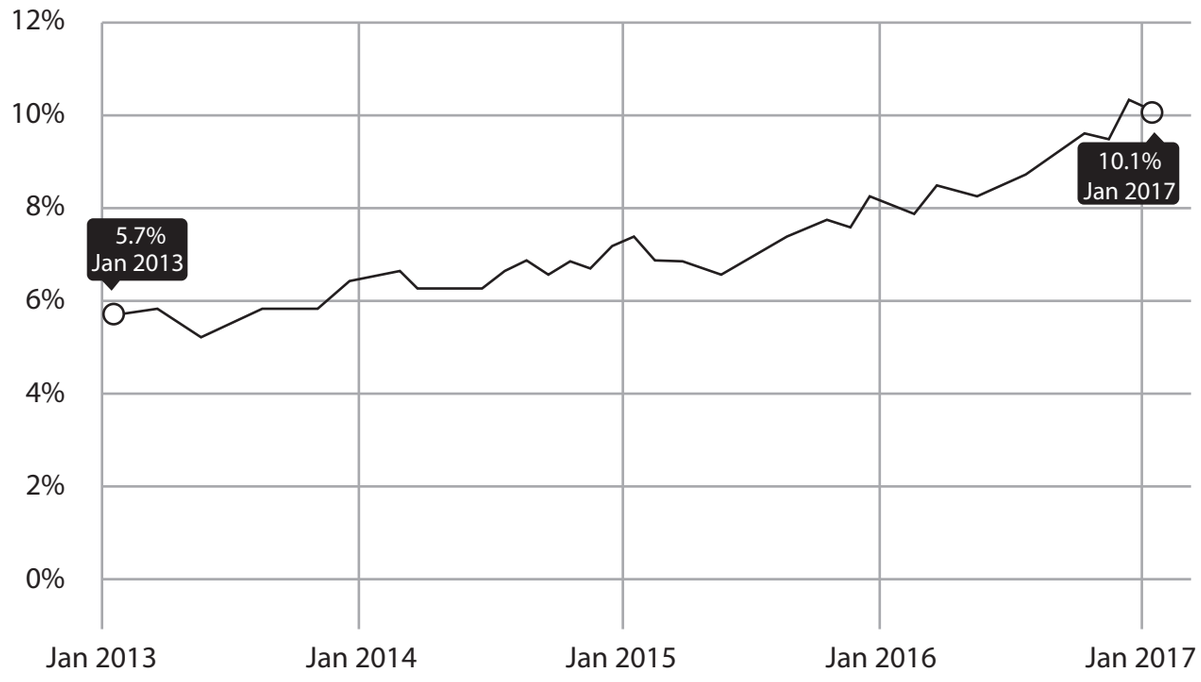


(Source: https://www.economist.com/news/britain/21706563-nhs-mess-reformers-believe-new-models-health-care-many-pioneered)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

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



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

Extract A

Hospitals already full

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

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

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

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

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

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

Extract B

How health care is funded

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

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

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

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

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

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

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

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

Extract C

Public parks are a public good

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

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

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

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

(5)

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

(6)

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

(10)

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

(4)

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

(15)

EITHER

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

(20)

OR

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

(20)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

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

(5)

The economic problem is that wants are infinite but resources are finite, so resources are scarce and choices have to be made.

In UK health care, wants are growing: the number of patients waiting for non-urgent treatment passed four million in 2017, and demand is rising due to an ageing population and new medical technologies. Figure 2 shows the percentage of patients waiting over 18 weeks rose from 5.7% in Jan 2013 to 10.1% in Jan 2017.

However, resources are finite: bed occupancy rates are approaching 99% compared with a recommended 85%, there are shortages of paramedics, doctors and nurses, and the NHS received only £1.6 billion in 2018, less than the £4 billion requested.

Because health resources are scarce, the NHS has to make choices about what to treat and for whom. For example, waiting list targets for routine hip and knee replacements may be sacrificed to protect A&E and cancer care. The opportunity cost of treating cancer patients quickly is longer waits for routine operations.

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

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

(6)

Asymmetric information occurs when one party in a transaction, usually the producer, knows more than the other, so information is imperfect. This leads to market failure because resources are misallocated and the free market outcome is not the socially optimal one.

In health care, doctors know far more about medical conditions and the treatment needed than patients do. A private doctor paid per treatment could recommend unnecessary treatment or overcharge, as patients are unaware of their true health needs and the true cost of care, so too many resources are allocated to some treatments.

Patients may also be unaware of how serious a condition is, or of the risk of requiring health care in the future, which is unknown. They may therefore not seek treatment or take out insurance, leading to under consumption of health care, so their health conditions deteriorate and they need more costly treatment later.

In private health insurance (PHI) the insurer knows less than the customer about their health, so it must charge higher premiums, such as £2 300 a year at age 70, and incur high administration costs assessing risk and claims. Healthy people may drop out, so health care is under provided compared with the socially optimal level.

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

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

(10)

A public good is a good which is non-excludable and non-rivalrous. Non-excludable means people cannot be prevented from consuming the good once it is provided, even if they do not pay, which creates the free rider problem. Non-rivalrous means one person's consumption does not reduce the amount available for others. Because of the free rider problem, public goods would not be provided by the free market, a missing market, so they are provided by the government and funded through taxation.

Extract C suggests public parks have these features. They are places which people can use 'for free' to exercise or relax, so people do not have to pay to enter, making them non-excludable in practice. Parkrun 'share the park with other park users' and 'there is no restriction on other people using the park', which suggests one person running in the park does not reduce another person's enjoyment of it, so parks are non-rivalrous. This is why local authorities provide them and maintain them from taxation, and why the government does not want councils to charge a free community event.

However, public parks are not a pure public good. Parks can be excludable: many have fences and gates that can be closed at certain times, and some areas such as tennis courts and football pitches are already booked for exclusive private use, with the public paying 'a reasonable sum'. Local authorities were planning to charge Parkrun for the use of the parks, which shows it is possible to exclude or charge users.

Parks may also be rivalrous in consumption, especially at busy times. Hundreds of joggers per park taking part in Parkrun may get in the way of other park users, causing congestion and reducing their enjoyment, and heavy use leads to wear and tear that raises maintenance costs. Once a tennis court is booked, nobody else can use it at the same time.

Overall, public parks are best described as a quasi-public good. Most of the open space is

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

non-excludable and largely non-rivalrous, so the statement is mostly true, but because parts of parks can be excluded and they become rival when congested, they are not a pure public good. How far the statement is true depends on the size of the park and how busy it is.

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

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

(4)

Number of visits charged = 10% of 450 million = 45 million visits (90% exempt)

Revenue = £12 × 45 million = £540 million

Check: £12 × 450 million = £5.4 billion; £5.4 billion × 90% = £4.86 billion exempt;

£5.4 billion – £4.86 billion = £0.54 billion

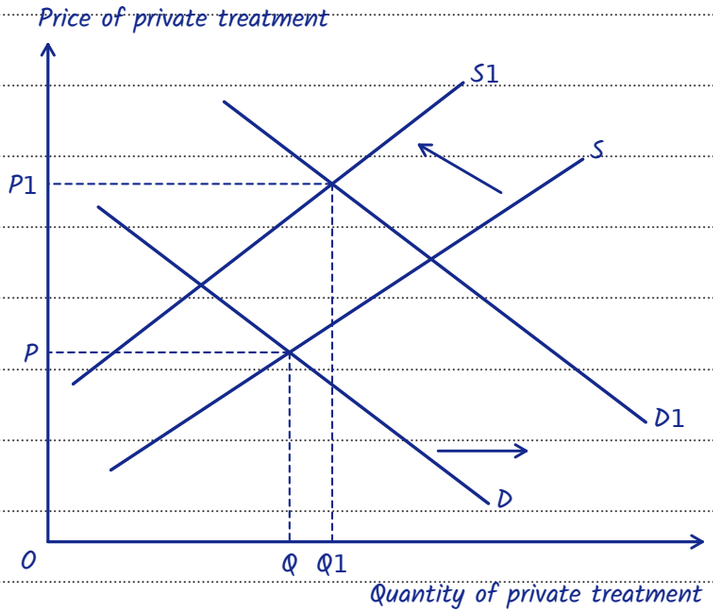
Annual revenue raised = £540 million (£0.54 billion)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

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

(15)



The price of private health care treatment is determined by the interaction of demand and supply. Extract B states that prices of treatment in private hospitals have increased significantly, even though the proportion of people taking out private health insurance has risen to 10.6%. As shown in my diagram, this is due to demand increasing from D to D1 and/or supply decreasing from S to S1, which raises the equilibrium price from P to P1.

One reason for the increase in demand is the ageing population. Older people are far more likely to need treatment such as hip and knee replacements, so more people want private care. New medical technologies also increase demand, as more conditions can now be treated. In addition, the NHS, a substitute for private care, has become less attractive: Figure 2 shows the percentage of patients waiting over 18 weeks rose from 5.7% to 10.1%, and over four million people are waiting for non-urgent treatment. Patients who can afford it switch to private hospitals to be treated sooner, so demand shifts right. Rising incomes and peer pressure may add to this.

On the supply side, the costs of providing private treatment are rising. There are

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

shortages of doctors, nurses and consultants (Extract A), so private hospitals must pay higher salaries to attract staff away from the NHS. New medical technologies and machinery are expensive, private hospitals face rising rents, and PHI incurs high management and administrative costs. Higher costs of production shift supply left from S to S1, increasing price further.

However, the size of the price rise depends on the magnitude of the shifts in demand and supply. If the increase in demand is proportionately small, prices will rise only slightly. It also depends on price elasticity of supply. In the short run supply of private treatment is likely to be price inelastic because it takes years to build hospitals and train doctors, so an increase in demand leads to a large price rise. In the long run supply becomes more elastic as new capacity is added, limiting future price rises.

Price elasticity of demand also matters. In the long run demand may become more price elastic if the NHS improves, for example if waiting times fall following extra funding, which would discourage further price increases as patients return to the NHS. Many patients pay through insurance, so they may be less sensitive to price in the short run, but insurers will push back against rising costs.

Other factors may reduce prices, such as government subsidies to encourage people to take out PHI, productivity gains from new technology or healthier lifestyles reducing the need for treatment. Overall, rising prices are most likely due to strong growth in demand from an ageing population and long NHS waits, combined with rising staff costs, but the extent depends on how inelastic supply is in the short run.

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

stemup.co.uk

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

EITHER

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

(20)

OR

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

(20)

Indicate which question you are answering by marking a cross in the box ☒. If you change your mind, put a line through the box ☒ and then indicate your new question with a cross ☒.

Chosen question number: **Question 6(f)** ☒ **Question 6(g)** ☒

Write your answer here:

Option (f)

Excess demand occurs when the quantity demanded exceeds the quantity supplied at the current price. State-funded health care in the UK is provided by the NHS 'free at the point of use', so at a price of zero the quantity demanded (Qd) is far greater than the quantity the government funds (Qs), as in my diagram. This is shown by over four million patients waiting for non-urgent treatment, bed occupancy approaching 99% and a projected funding gap of around £20 billion by 2020 in Figure 1.

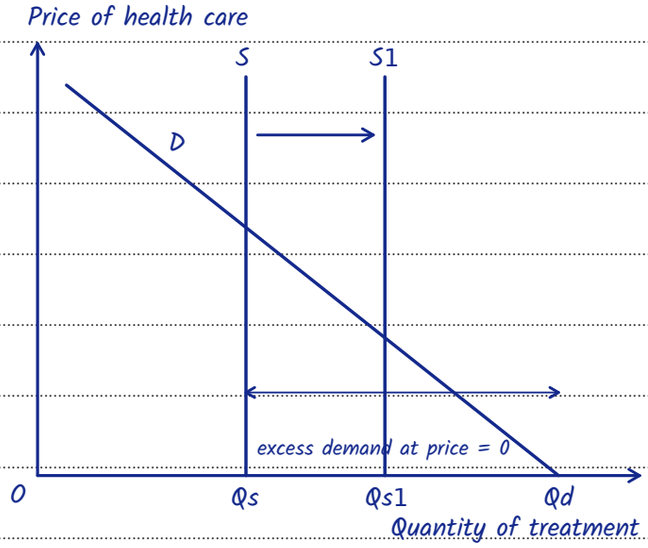
Firstly, the government could increase spending on direct provision, building new hospitals and training more doctors and nurses. This shifts supply right from S to S1, reducing excess demand from Qd – Qs to Qd – Qs1. For example, the NHS asked for £4 billion to keep up with an ageing population. However, the government only awarded £1.6 billion in 2018, as there is an opportunity cost, since the money could be spent on education, or must be raised through higher taxes or borrowing. Supply of health care is also price inelastic in the short run: it takes around seven years to train a doctor, so there is a time lag, and extra spending may be lost to inefficiency rather than more treatment.

Secondly, the government could charge for NHS services, such as the proposed £12 charge for visiting a GP. A price rations health care and deters overuse by those without

DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA

stemup.co.uk

genuine health needs, reducing quantity demanded along the demand curve, and it raises revenue. However, with 90% of patients exempt it would raise only £540 million, and administrative costs of collecting the charge and verifying exemptions would reduce this



further. There is a risk of unintended consequences: low income patients just above the exemption threshold may delay seeing a GP, leading to under consumption and more expensive emergency treatment later, which is government failure.

Thirdly, the government could reduce demand for health care by tackling the causes of ill health. Indirect taxes, specific or ad valorem, on sugary drinks or high fat foods raise their price and reduce consumption, while subsidies for healthy food or gym memberships, or maximum prices on healthy food and minimum prices on alcohol, encourage healthier lifestyles. The state can also provide public goods such as public parks for free exercise, and provide information such as the '5 a day' campaign, or use regulation to restrict sugar content. These reduce obesity and related illnesses, shifting demand for NHS care left in the long run. However, demand for products such as sugary drinks is price inelastic and habit forming, so taxes may have only a small effect and are regressive. Information gaps also exist, as consumers may ignore campaigns because of irrational behaviour and peer pressure, and the benefits only appear after a long time lag.

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

Finally, the government could subsidise private health insurance, which would take some people out of the state system and reduce the burden on the NHS. However, PHI costs £2 300 a year at age 70, so subsidies mainly benefit higher income groups, and private hospitals compete with the NHS for scarce doctors and nurses, raising wages.

In conclusion, there is no single solution. Increasing funding is the most direct way to reduce excess demand, but it is costly and slow because supply is inelastic. Charges risk government failure through under consumption, so in the short run the most effective approach is extra funding targeted at capacity, combined in the long run with taxes, subsidies and information that reduce demand. The magnitude of the effect depends on the size of the funding change and how efficiently it is used.

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

Option (g)

A free market approach means health care would be allocated by the price mechanism, with private firms supplying treatment for profit, as Adam Smith's invisible hand and Hayek argued is most efficient. This contrasts with a command economy, favoured by Marx, where the state allocates resources, and the UK's mixed economy, where the NHS provides care funded from taxation alongside private providers.

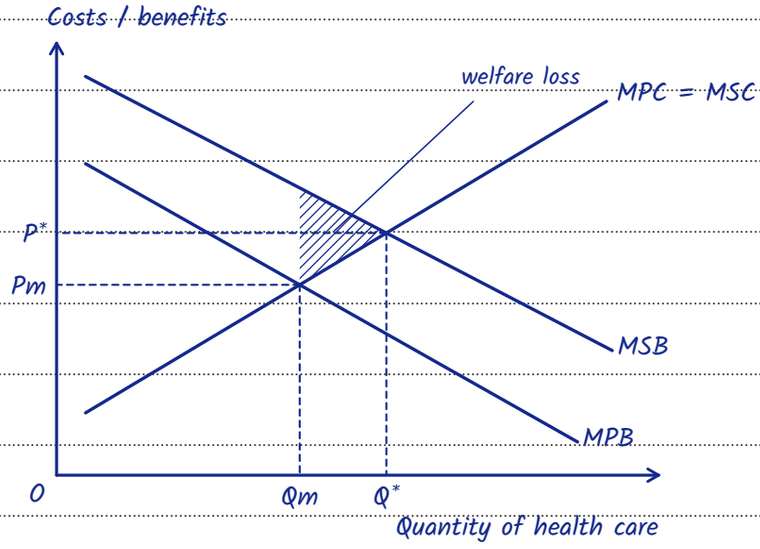
Firstly, health care has large positive externalities, so the free market would under provide it. When a person is vaccinated or treated for an infectious disease, third parties benefit because they are less likely to catch it, and a healthy workforce raises output. As my diagram shows, consumers only consider their marginal private benefit, so the free market produces at Qm, where MPB = MPC, below the socially optimal level Q^*, where MSB = MSC. The hatched area is the welfare loss. People who are sick and unable to work also reduce the potential output of the economy, moving it inside its PPF.

Secondly, there is asymmetric information. Doctors know far more than patients, so in a profit-driven market patients may be overcharged or sold unnecessary treatment, while others may not realise they need treatment, leading to under consumption. The profit incentive could therefore misallocate resources ahead of patient needs, for example towards profitable cosmetic procedures rather than care for chronic conditions.

Thirdly, there are concerns about affordability and equity. Under a free market people would have to pay for treatment or for private health insurance. A typical PHI policy costs £650 a year at age 35 but £2 300 at age 70, when claims are more likely, so the elderly, children and low income groups, who need care most, may be priced out. There could be missing markets for those deemed too high risk, or for remote rural areas where it is unprofitable to provide services. Preventative early treatment would be under consumed, raising costs later. Resources would also be wasted on administration, as PHI incurs high costs assessing risk and claims.

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

However, a free market approach also has advantages. The price mechanism performs rationing, signalling and incentive functions: higher prices signal where demand is greatest and give firms an incentive to supply more. Extract B states that private health care 'increases choice for users, encourages competition and drives up standards of care'. Competition encourages innovation and efficiency, whereas the NHS faces long waiting



lists, with 10.1% of patients waiting over 18 weeks, and limited choice. Charging also deters overuse of services by people without genuine needs.

Furthermore, the alternative of state provision has its own problems. The NHS faces a funding gap of around £20 billion by 2020 (Figure 1), and government failure can occur through inefficiency, lack of a profit motive and information gaps about what patients want. Some argue the NHS is more efficient and fair than the private sector, but others argue a mixed economy combines the disadvantages of both systems.

In conclusion, the disadvantages of a pure free market in health care are significant, because positive externalities, asymmetric information and inequity mean health care would be under consumed by those who need it most. The extent depends on how far government regulation, insurance and subsidies can correct these failures. On balance, a mixed economy, as in the UK, is a sensible compromise: state provision ensures access

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

for all, while a private sector adds choice and competition and reduces pressure on the NHS.

(Total for Question 6 = 60 marks)

TOTAL FOR SECTION B = 60 MARKS
TOTAL FOR PAPER = 80 MARKS

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

BLANK PAGE

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

stemup.co.uk