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OCR A-LEVEL ECONOMICS: QUESTIONS BY TOPIC

The Role of Markets

OCR A-level Economics H460 — Topic MICRO 2

85 questions · 478 marks · Mark schemes included

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HOW TO USE THIS BOOKLET

Questions run from the lowest mark tariff to the highest, so similar questions sit together.

Click any row below to jump straight to that question.

On every question page, click the header (top right) to jump to its mark scheme, and click again to jump back.

Mark schemes are collected together at the end of this booklet, cropped from the genuine OCR mark-scheme grid.

85 questions · 478 marks · lowest tariff first

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QUESTIONS

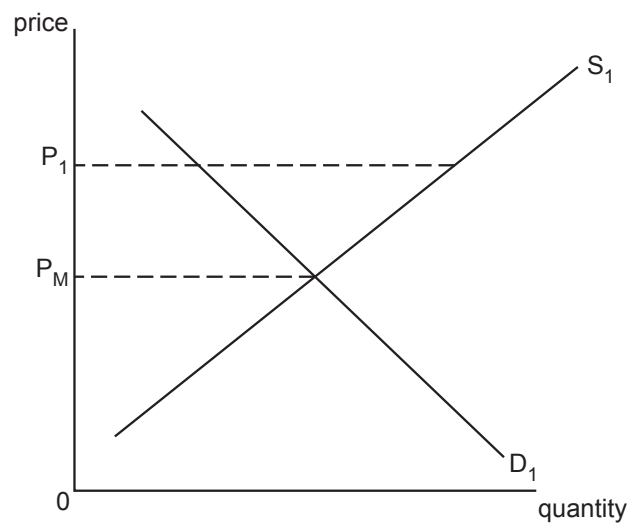
85 questions · 478 marks · lowest tariff first

1-MARK QUESTION

43 questions in this booklet

9

- 15 The market equilibrium price is P_M . What could have caused the price to be at P_1 ?



- A Maximum price
- B Minimum price
- C Subsidy
- D Tax

Your answer

☐

[1]

- 16 Which of the following is an insight from the Austrian school of thought?

- A Increasing public spending can promote economic recovery in times of recession
- B Prices are determined by subjective factors such as individual preference
- C The economy will rapidly converge to the natural rate of output
- D There is a trade-off between unemployment and inflation

Your answer

☐

[1]

10

17 Which component of the balance of payments accounts for dividends from foreign stocks and shares?

- A Capital account
- B Credit account
- C Current account
- D Financial account

Your answer

[1]

18 The demand for a good is expected to decrease from 52 000 to 46 000 when average incomes increase from £20 000 to £24 000. What is the income elasticity of demand for the good?

- A -1.73
- B -0.78
- C -0.58
- D 1.73

Your answer

[1]

19 When would the quantity of labour supplied increase more than proportionally to an increase in the wage rate?

- A It is easy to substitute labour for capital
- B Labour costs take up a high proportion of total costs
- C There is a high level of skill required in the job
- D The job requires minimal training

Your answer

[1]

12

24 The data below shows key macroeconomic performance indicators for four countries.

	2016 Inflation Rate (CPI)	2016 Unemployment Rate (ILO)	2015 GDP Growth Rate	2016 GDP Growth Rate
Ireland	0%	8.1%	26.3%	5.2%
Malta	0.6%	5.3%	7.4%	5%
Ukraine	13.9%	8.9%	-9.8%	2.3%
United Kingdom	0.6%	4.8%	2.2%	1.8%

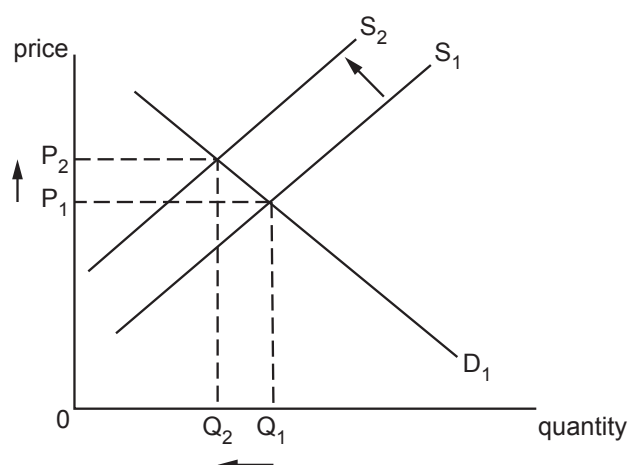
If an economist was judging the performance of these economies from the perspective of the UK government macroeconomic policy objectives, which would they decide performed best?

- A Ireland
- B Malta
- C Ukraine
- D United Kingdom

Your answer

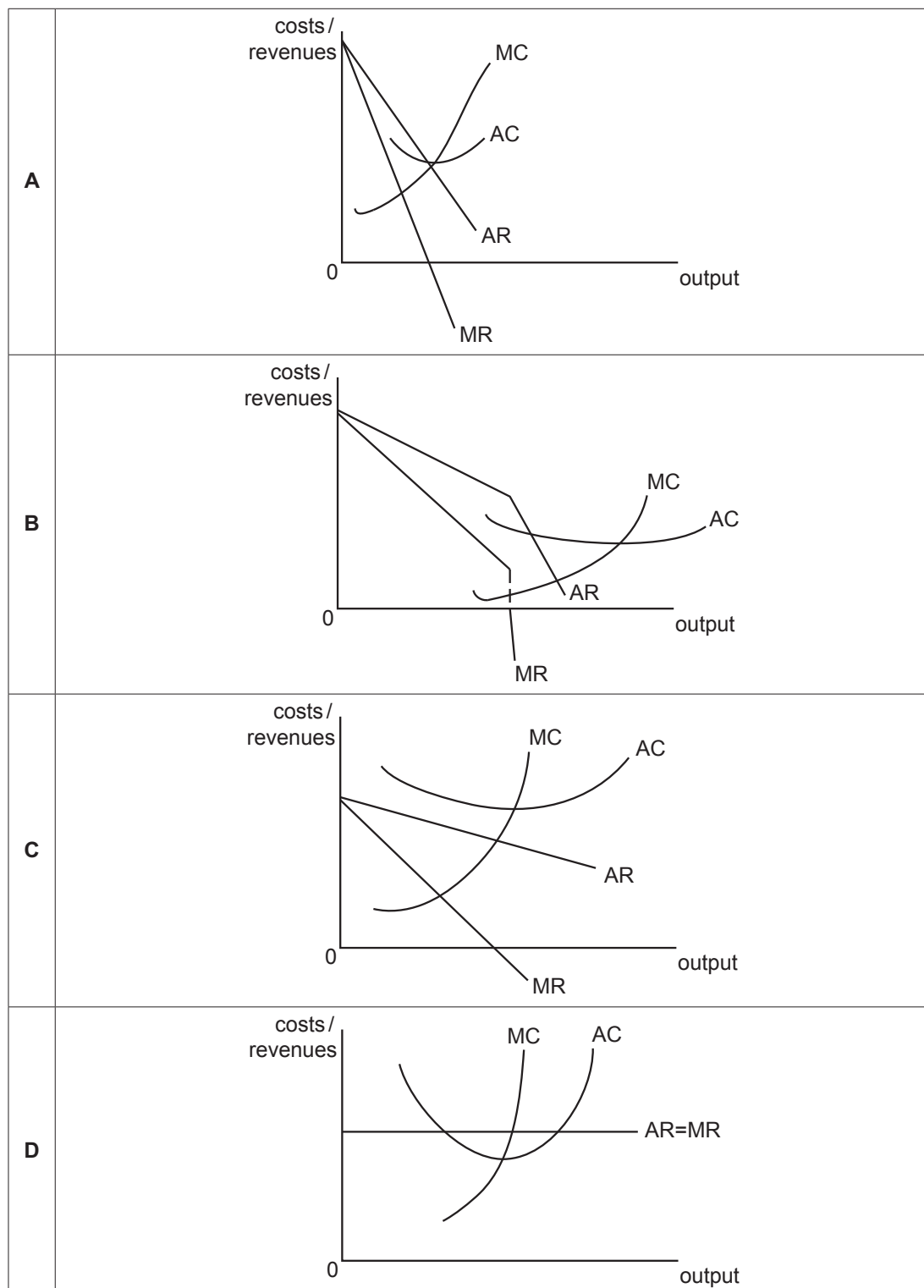
[1]

25



In each of the cases on page 13, firms are operating as profit maximisers. Which would cause the response on an industry level indicated in the diagram above?

13



Your answer

[1]

14

- 26 The table below illustrates the utility derived from consuming lettuce. What is the marginal utility of consuming the fourth lettuce?

Quantity	Total Utility (Utils)
1	9
2	17
3	23
4	28
5	32
6	35
7	37

- A 4
B 5
C 6
D 7

Your answer

[1]

- 27 Why might the ILO (International Labour Organisation) unemployment rate overestimate the level of unemployment there is in an economy?

- A Sampling errors may exist in the data
B Some individuals may be claiming benefits but are not actually willing to work
C The economically inactive are included
D There may be underemployment where part-time workers cannot find full-time jobs

Your answer

[1]

15

- 28** In the 2017 UK General Election, the Conservative Party proposed a reform to social care that would involve individuals whose combined savings and property are valued at more than £100 000 paying for the cost of care they incur in their old age. The likely impact of this would be to reduce the amount of inheritance passed on to future generations. Which of the following would be affected by this in the long run?

- A** Both income and wealth inequality
- B** Income inequality only
- C** Neither income or wealth inequality
- D** Wealth inequality only

Your answer

☐

[1]

- 29** Which of the following explains price elasticity of demand along a straight line demand curve?

- A** Demand becomes more price elastic as the price increases
- B** Demand becomes more price inelastic as the price increases
- C** PED is constant as the price increases
- D** PED is unit elastic as the price increases

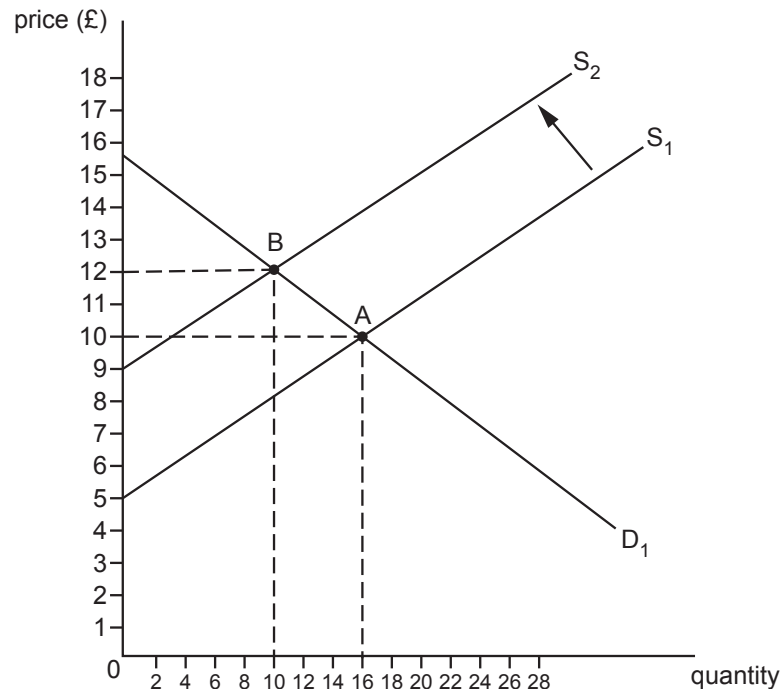
Your answer

☐

[1]

5

- 8 What is the change in producer surplus as a result of the market equilibrium moving from point A to point B in the diagram below?



- A -£31
 B -£25
 C £25
 D £31

Your answer

[1]

- 9 Sweden is generally considered to have relatively high unit labour costs. What might be the reason for this?

- A High investment in physical capital
 B High levels of employment protection laws
 C Low costs of living
 D Low tax rates

Your answer

[1]

2

SECTION A

Answer **all** the questions in this section.

Write your answer for each question in the box provided.

1 What is the impact of a decrease in price?

- A An increase in quantity demanded
- B An increase in quantity supplied
- C A shift to the right of the demand curve
- D A shift to the right of the supply curve

Your answer

[1]

2 If real GDP in 2019 was \$482bn and \$476bn in 2020, what was the rate of economic growth in 2020?

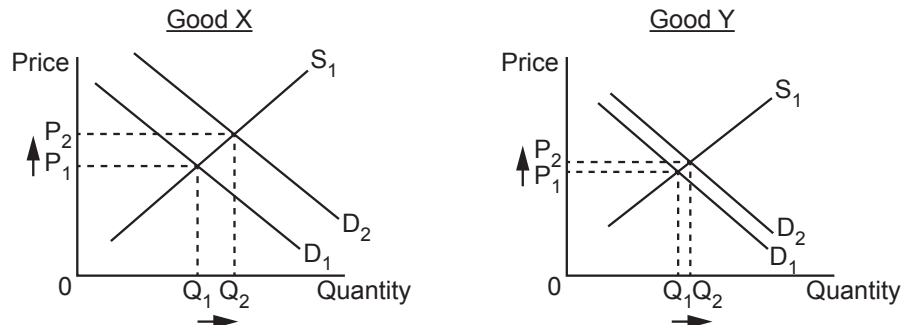
- A -1.26%
- B -1.24%
- C 1.24%
- D 1.26%

Your answer

[1]

8

- 14 The diagrams below show how the markets for goods X and Y respond to a change in one of the determinants of demand. What might it be possible to conclude from this?



- A Demand for good X is more cross elastic than the demand for good Y
- B Demand for good X is more income elastic than demand for good Y
- C Demand for good X is more price elastic than the demand for good Y
- D Supply of good X is more price elastic than supply of good Y

Your answer

[1]

- 15 What would cause the demand for labour to increase?

- A An increase in the minimum wage
- B An increase in the price of complementary factors of production
- C An increase in the price of the product the labour produces
- D An increase in unit labour costs

Your answer

[1]

9

- 16 An individual going on holiday to Spain exchanges £100 into euros when the exchange rate was 1.26 euros to 1 pound. They spend 82 euros and when they return from holiday exchange what they have left into pounds. By this point the exchange rate has changed to 1.14 euros to 1 pound. How many pounds are they left with?

- A £34.92
- B £38.60
- C £44.00
- D £50.16

Your answer

[1]

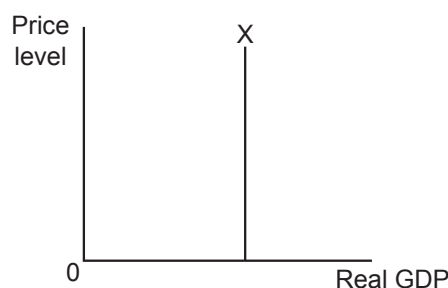
- 17 Which elasticity is the availability of stock of the product likely to impact?

- A Cross elasticity of demand
- B Income elasticity of demand
- C Price elasticity of demand
- D Price elasticity of supply

Your answer

[1]

- 18 What does curve X represent?



- A Long run Aggregate Supply
- B Long run Phillips Curve
- C Short run Aggregate Supply
- D Short run Phillips Curve

Your answer

[1]

10

- 19 The separation between ownership and control means managers are likely to be more incentivised to pursue sales revenue maximisation over profit maximisation. What type of firm is this most likely to describe?

- A Public limited company
- B Public sector company
- C Small business
- D Voluntary organisation

Your answer

☐

[1]

- 20 Money fulfils a number of important functions, including acting as a medium of exchange. What characteristic would prevent money from fulfilling this function?

- A Durable to use
- B Portable to carry
- C Scarce in supply
- D Volatile in value

Your answer

☐

[1]

- 21 Who is most likely to be categorised as being unemployed?

- A 19 year old full time student.
- B 38 year old father who chooses to stay at home to be a home-maker.
- C 42 year old former bank worker who is economically active.
- D 68 year old who worked in the steel industry and who is now claiming the state pension.

Your answer

☐

[1]

12

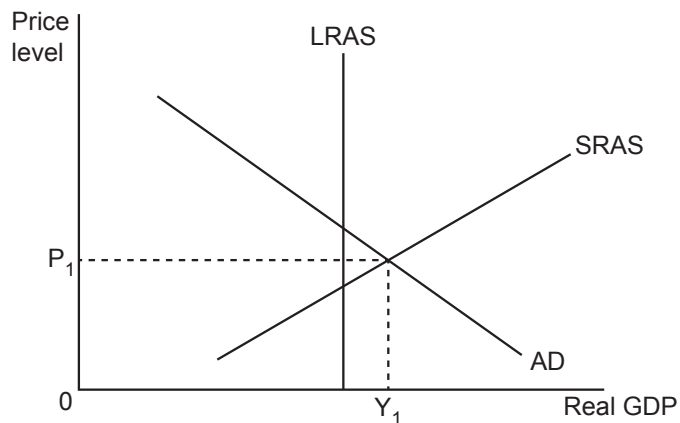
- 24 Kai purchases a second-hand car for £12 000. However, they only derive £7 000 utility from the car during the five years that they own it. What is likely to have occurred at the point of purchase to cause this?

- A Information failure
- B Moral hazard
- C Negative externalities of consumption
- D Opportunity cost

Your answer

[1]

- 25 An economy is producing at Y_1 , P_1 . What is happening at this point?



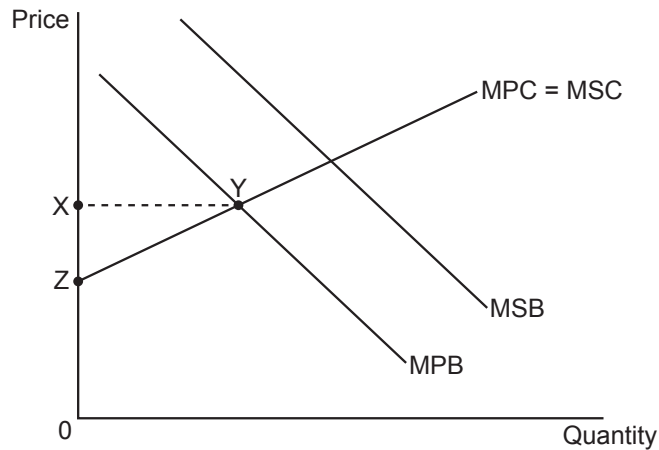
- A Deflation
- B Inflation
- C Negative output gap
- D Positive output gap

Your answer

[1]

14

- 29 The diagram shows the market for a good which is allocated in the free market without government intervention. What is represented by area XYZ?



- A Allocative inefficiency
- B Consumer surplus
- C Deadweight loss
- D Producer surplus

Your answer

[1]

- 30 What is the most likely impact of a policy decision to reduce the amount of protectionism in a country?

- A Domestic firms face higher tariffs on their exports
- B Sunset industries experience a decrease in the demand for their products
- C The rate of inflation increases
- D The volume of international trade decreases

Your answer

[1]

4

- 5 The table below shows the output of corn and golf clubs Country X and Country Y could produce if they used all of their resources to produce one of these goods. What can be concluded about Country X from the data?

	Corn	Golf clubs
Country X	1000 units	450 units
Country Y	5000 units	900 units

- A It has an absolute advantage in the production of corn and golf clubs
- B It has an absolute advantage in the production of golf clubs
- C It has a comparative advantage in the production of corn
- D It has a comparative advantage in the production of golf clubs

Your answer

☐

[1]

- 6 What could cause the natural rate of unemployment to decrease?

- A An increase in corporation tax
- B An increase in government spending on welfare benefits
- C An increase in government spending on education and training
- D An increase in the price level

Your answer

☐

[1]

- 7 *'There are insufficient resources to meet society's wants.'*

What does this statement describe?

- A Positive externalities of consumption
- B Positive externalities of production
- C The basic economic problem
- D The free rider problem

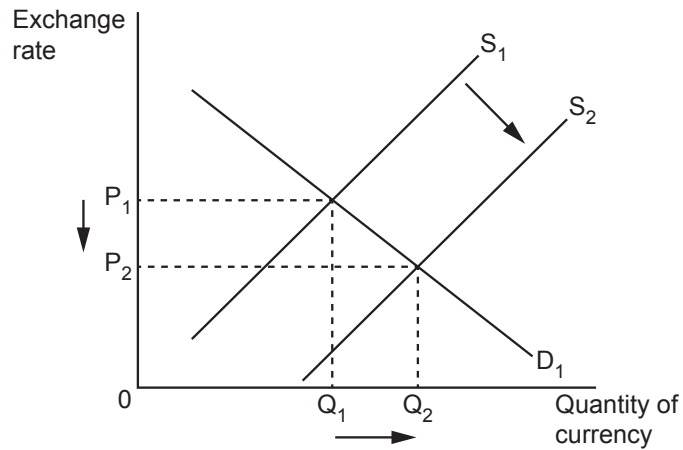
Your answer

☐

[1]

5

- 8 The diagram below shows the value of a country's currency. What is most likely to have caused the change illustrated here?



- A A decrease in the marginal propensity to import
- B Contractionary monetary policy
- C Expansionary monetary policy
- D Supply side policy designed to increase labour productivity

Your answer

[1]

- 9 What type of good is described as being excludable and rival?

- A Free good
- B Private good
- C Public good
- D Quasi-public good

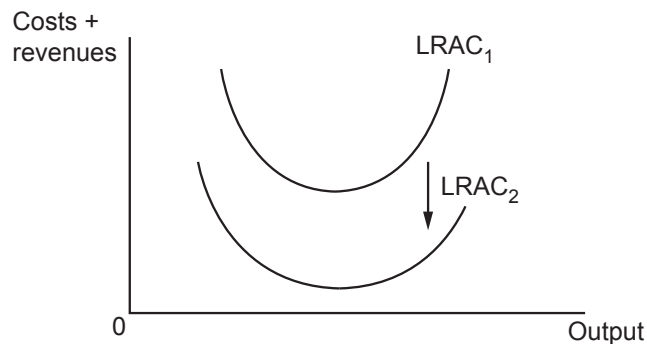
Your answer

[1]

6

- 10 A firm experiences a shift in its long run average cost curve from $LRAC_1$ to $LRAC_2$ in the diagram.

What is the most likely cause of this?



- A An increase in input prices resulting from new firms entering the market
- B An increase in the availability of skilled labour as a result of growth in the industry
- C Coordination problems arising as a result of an increase in the scale of production
- D Greater division of labour occurring as a result of the growth of the firm

Your answer

☐

[1]

- 11 What is **one** of the causes of government failure?

- A Externalities of consumption or production
- B Policy short-termism
- C The free rider problem
- D The principal-agent problem

Your answer

☐

[1]

8

- 13 What is the likely impact on the wage rate and level of employment of an increase in the marginal physical product of labour in an industry?

Option	Employment	Wage Rate
A	Decreases	Increases
B	Increases	Unchanged
C	Increases	Increases
D	Unchanged	Increases

Your answer

[1]

- 14 A smartphone manufacturer sees the demand for its phone rise in response to a decision to reduce its price below that of a competitor.

How can this rise in demand be shown on a diagram?

- A A contraction along the demand curve
- B An extension along the demand curve
- C The demand curve shifting to the left
- D The demand curve shifting to the right

Your answer

[1]

8

- 13 What is the likely impact on the wage rate and level of employment of an increase in the marginal physical product of labour in an industry?

Option	Employment	Wage Rate
A	Decreases	Increases
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Your answer

[1]

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- B An extension along the demand curve
- C The demand curve shifting to the left
- D The demand curve shifting to the right

Your answer

[1]

9

15 Brazil has a progressive income tax system with the following income tax rates:

Income at or over (Brazilian real – BRL)	Up to (BRL)	Tax Rate (%)
0	22 849	0
22 850	33 920	7.5
33 921	45 012	15.0
45 013	55 976	22.5
55 977	and above	27.5

What is the marginal tax rate for an individual who gets a pay rise of 15 000 BRL having initially earned 51 000 BRL?

- A 11.7%
- B 22.5%
- C 25.8%
- D 27.5%

Your answer

[1]

16 What type of efficiency is a profit maximising monopoly most likely to display?

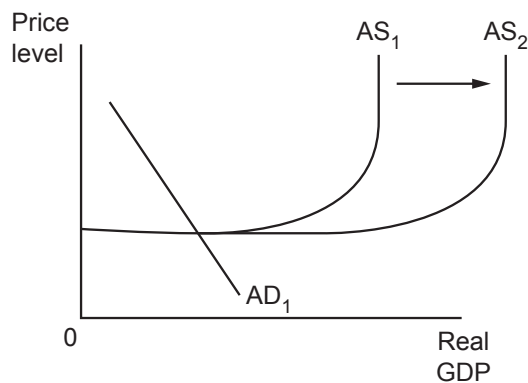
- A Allocative efficiency
- B Dynamic efficiency
- C Productive efficiency
- D X-efficiency

Your answer

[1]

12

- 21 What is the impact of a shift in the aggregate supply curve from AS_1 to AS_2 in the diagram?



- A Long run economic growth
- B Neither short run or long run economic growth
- C Short run and long run economic growth
- D Short run economic growth

Your answer

☐

[1]

- 22 An individual renting a car for a week's holiday can pay a premium of £85 to the car rental company. If they damage the car during the rental period they do not need to pay.

Evidence suggests individuals are more likely to damage their rental cars as a result of paying this premium.

What is this an example of?

- A Asymmetric information
- B Moral hazard
- C Negative externalities of consumption
- D Negative externalities of production

Your answer

☐

[1]

13

23 What is a barter system?

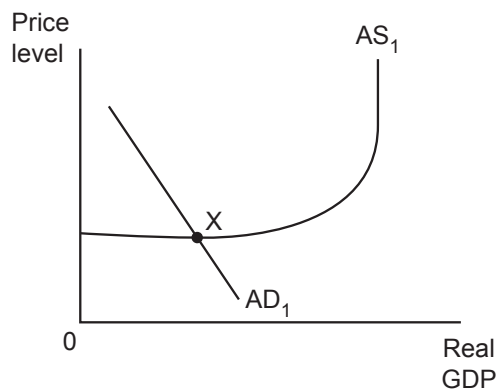
- A Firms collude to agree on prices
- B Goods and services are directly exchanged
- C The government intervenes in a commodity market to stabilise the price
- D Workers are assigned to particular stages of the production process

Your answer

[1]

24 A government managing an economy currently operating at point X in the diagram is considering pursuing demand-side economic growth.

Which macroeconomic policy objective is this most likely to conflict with?



- A Economic development
- B Full employment
- C More even distribution of income
- D Sustainable balance of payments position

Your answer

[1]

15

- 27 The European Central Bank aims to keep the price level in the Eurozone rising at a rate of below but close to 2% a year.

What is this an example of?

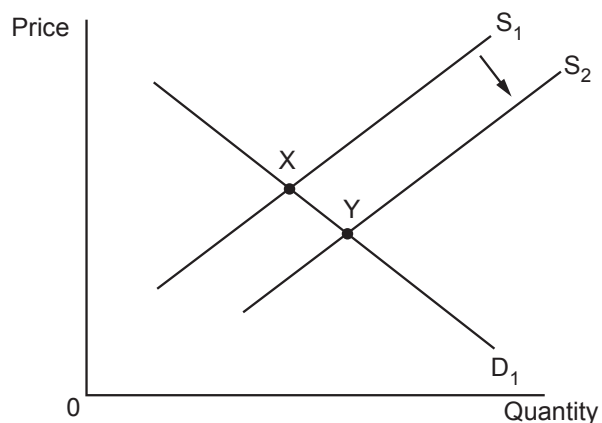
- A A conflict between macroeconomic policy objectives
- B A satisfactory balance of payments position
- C A symmetric inflation target
- D An asymmetric inflation target

Your answer

[1]

- 28 The diagram shows the market for fried chicken.

What is the most likely cause of the market equilibrium moving from point X to point Y?



- A A change in tastes and preferences
- B An increase in labour productivity
- C An increase in regulation
- D A reduction in income tax

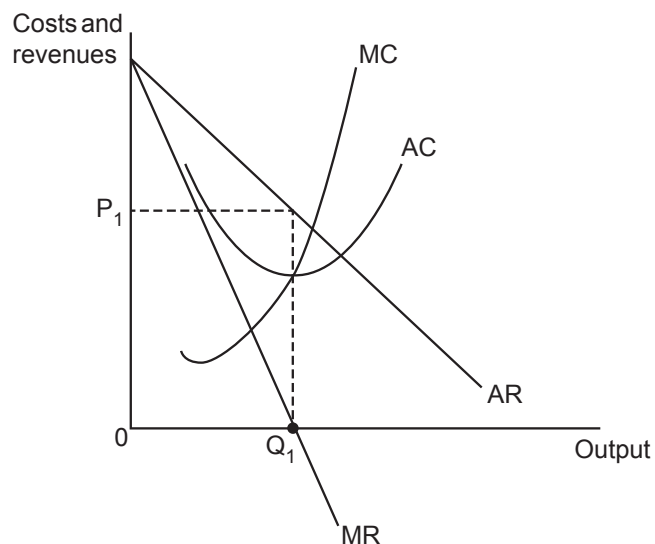
Your answer

[1]

3

- 3 A firm is producing Q_1 units of output at a price of P_1 in the diagram below.

What objective is it likely to be pursuing?



- A Profit maximisation
- B Profit satisficing
- C Sales revenue maximisation
- D Sales volume maximisation

Your answer

[1]

- 4 650 units of a good are demanded by consumers. If the income elasticity of demand is 0.4, what will the new quantity demanded of the good be if income decreases by 3%?

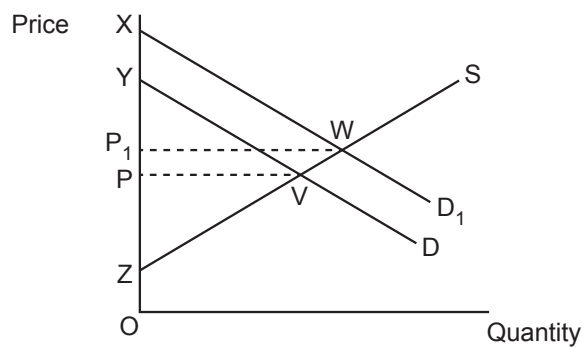
- A 601 units
- B 631 units
- C 642 units
- D 658 units

Your answer

[1]

10

18 In the diagram the demand for the good shifts from D to D_1 .



What area represents the change in the producer surplus?

- A P V Z
- B P V W P_1
- C P_1 W X
- D P_1 W Z

Your answer

[1]

19 Which of these is a leakage from the circular flow of income?

- A Exports
- B Imports
- C Investment
- D Wage

Your answer

[1]

2

Section A

Write your answer to **each** question in the box provided.

1 What is the reward to enterprise?

- A Interest
- B Profit
- C Rent
- D Wages

Your answer

[1]

2 The marginal propensity to withdraw (mpw) in an economy is 0.6.
There is an injection of £150bn into the economy.

What is the final increase in GDP?

- A £90 billion
- B £100 billion
- C £250 billion
- D £375 billion

Your answer

[1]

3 Which of these is a function of money?

- A Divisibility
- B Durability
- C Limited supply
- D Unit of account

Your answer

[1]

11

20 Moral hazard is a situation where:

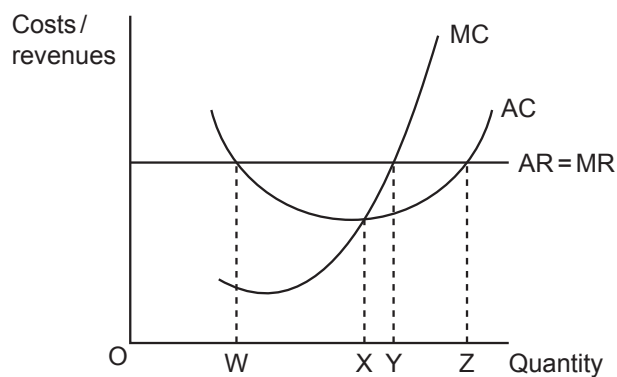
- A Buyers and sellers have different information which results in market failure
- B Firms or households are more likely to take risks if they are insured against any negative impact of their actions
- C Goods are under demanded by consumers and therefore underprovided by markets
- D People are able to consume a good without paying for it

Your answer

☐

[1]

21 The diagram shows a firm in a perfectly competitive market making supernormal profit in the short run.



What is the allocatively efficient level of output?

- A W
- B X
- C Y
- D Z

Your answer

☐

[1]

13

24 What is the least liquid asset?

- A Central bank reserves
- B Sight deposits
- C Notes and coins
- D Time deposits

Your answer

[1]

25 A maximum price for rent is imposed in the London housing market.

What is the likely impact?

- A A decrease in consumer surplus
- B An excess demand for rental housing
- C An increase in government tax revenue
- D An increase in producer surplus

Your answer

[1]

26 What is a characteristic of both a market operating under perfect competition and a contestable market?

- A Freedom of entry and exit
- B Homogenous goods
- C Many firms
- D Price discrimination

Your answer

[1]

3

4 Which of these describes the process of crowding out?

- A An increase in government spending leads to a fall in private sector investment
- B The process by which government spending and tax revenue vary with the economic cycle
- C The transfer of an organisation from public sector ownership and control to private sector ownership and control
- D When monetary policy becomes ineffective as households prefer to save even though interest rates are very low

Your answer

[1]

5 As a result of a 12% reduction in the price of Good A, the quantity demanded of Good B increased by 3%.

What is the relationship between the two goods?

- A Strong complements
- B Strong substitutes
- C Weak complements
- D Weak substitutes

Your answer

[1]

6

- 9 The table shows the total utility from consuming units of a good.

Unit of Consumption	Total Utility
1	20
2	25
3	31
4	35
5	38
6	40
7	39

What unit of consumption does the consumer begin to experience diminishing marginal utility?

- A 4
B 5
C 6
D 7

Your answer

[1]

- 10 A UK firm imports oranges from Portugal. 200 kg of oranges costs the firm 300 euros. The exchange rate is £1 Sterling to 1.2 euros.

How much does 400 kg of oranges cost the firm in £ Sterling?

- A £250
B £360
C £500
D £72

Your answer

[1]

12

25 What could cause wages in an occupation to be lower than in other occupations?

- A A long training period is required before starting the job
- B A high proportion of workers in the occupation are members of a trade union
- C Wages take up a high proportion of total costs
- D Workers have a high marginal revenue product of labour

Your answer

[1]

26 In 2014, researchers found that up to a third of women were not taking folic acid supplements in the first 12 weeks of their pregnancy. In response the government increased its efforts to provide information to women about the need for folic acid to aid the healthy development of their baby's spine. On the basis of this information, what type of good is folic acid?

- A A demerit good
- B A good with negative externalities of consumption
- C A good with positive externalities of consumption
- D A merit good

Your answer

[1]

27 Using the table below, what was the inflation rate in 2017?

Year	Consumer Price Index
2014	98.2
2015	100.0
2016	103.4
2017	101.9
2018	103.6

- A -1.50%
- B -1.45%
- C 1.47%
- D 1.90%

Your answer

[1]

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13

28 Wood is used to make paper and furniture, amongst other things. What type of demand is this?

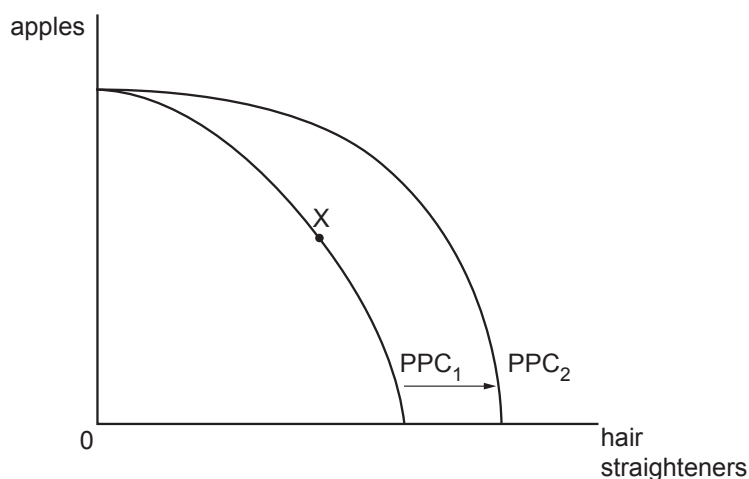
- A Competitive demand
- B Composite demand
- C Joint demand
- D Market demand

Your answer

☐

[1]

29 An economy in which apples and hair straighteners are produced is initially operating at point X. If the production possibility curve shifts from PPC_1 to PPC_2 , which of the statements identifies the change in the production possibilities?



- A It is not possible to increase the production of either apples or hair straighteners
- B It is only possible to increase the production of apples
- C It is only possible to increase the production of hair straighteners
- D It is possible to increase the production of both apples and hair straighteners

Your answer

☐

[1]

3

- 3 A change in the price of good X causes the demand for good Y to increase by 4.5%. The cross elasticity of demand between the two goods is 1.7. If the price of good X is now £2.50, what was its original price?

- A £2.32
- B £2.44
- C £2.49
- D £2.57

Your answer

[1]

- 4 What would cause the exchange rate to depreciate?

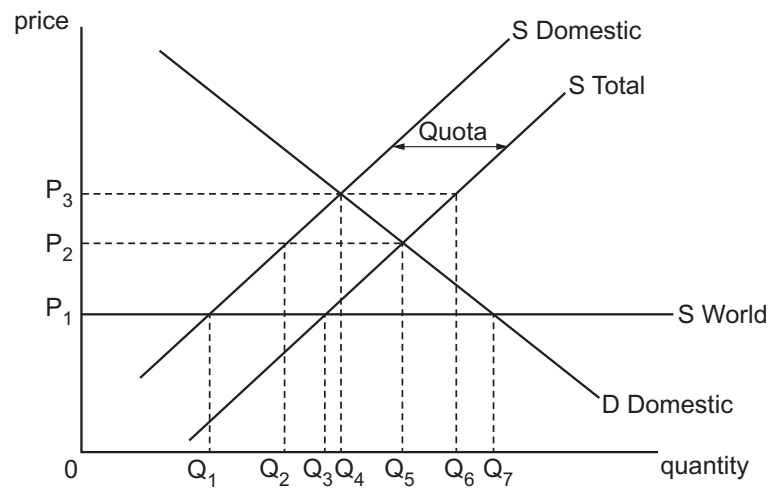
- A An increase in domestic incomes
- B An increase in incomes abroad
- C Export subsidies
- D Technological advancement of domestic goods

Your answer

[1]

4

- 5 The diagram below shows the market for textiles in the US. Suppose the market was initially operating at a price of P_1 , when no restrictions on trade were in place. What is the new market equilibrium as a result of the US imposing a quota on textiles imports?



Option	Price	Domestic Production	Quantity Consumed
A	P_1	Q_1	Q_3
B	P_2	Q_2	Q_5
C	P_2	Q_5	Q_5
D	P_3	Q_4	Q_6

Your answer

[1]

- 6 What is the reward to labour as a factor of production?

- A Interest
- B Profit
- C Rent
- D Wages

Your answer

[1]

5

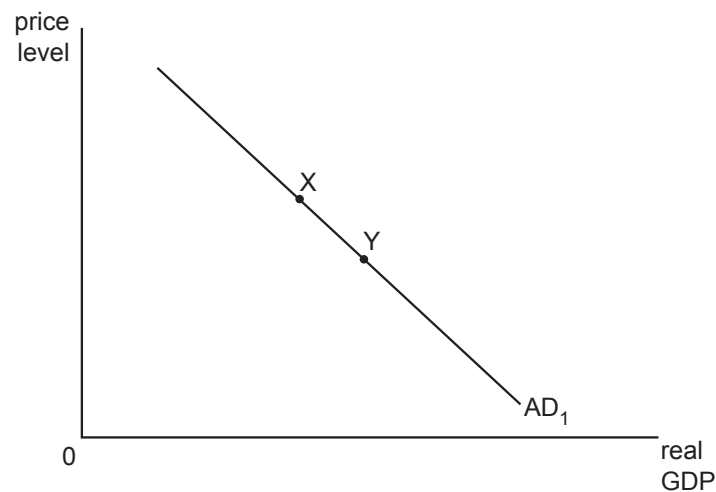
- 7 A resident of London being protected by Trident, the UK's nuclear defence system, does not affect a resident of Sunderland's ability to be protected by Trident. Which feature of a public good is described here?

- A Non-excludability
- B Non-rejectability
- C Non-rivalry
- D Zero opportunity cost

Your answer

[1]

- 8 What explains a movement from X to Y in the diagram below?



- A A decrease in corporation tax rates
- B An exchange rate depreciation
- C An increase in interest rates
- D An increase in the real value of households' wealth

Your answer

[1]

7

10 What indicates a structural budget deficit?

- A Government expenditure exceeds tax revenue in the downturn of a business cycle
- B Government expenditure exceeds tax revenue when the economy is at full employment
- C Tax revenue exceeds government expenditure in the downturn of a business cycle
- D Tax revenue exceeds government expenditure when the economy is at full employment

Your answer

[1]

11 In 2019 the price level in Nigeria increased by 11.4%, compared to a 12.1% increase in prices in 2018. What does this represent?

- A Deflation and disinflation
- B Disinflation and hyperinflation
- C Hyperinflation and inflation
- D Inflation and disinflation

Your answer

[1]

12 What is marginal external cost equal to?

- A Marginal private cost – marginal social cost
- B Marginal social cost
- C Marginal social cost + marginal private cost
- D Marginal social cost – marginal private cost

Your answer

[1]

10

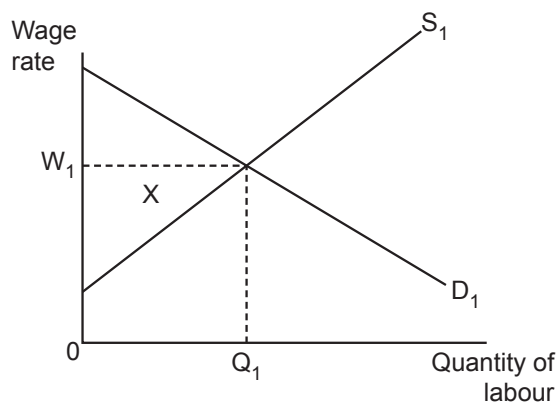
18 Which of the following is the most likely recipient of microfinance?

- A Individuals in developed nations
- B Individuals in developing nations
- C Public limited companies in developed nations
- D Public limited companies in developing nations

Your answer

[1]

19 What does area X in the diagram below represent?



- A Consumer surplus
- B Economic rent
- C Producer surplus
- D Transfer earnings

Your answer

[1]

10

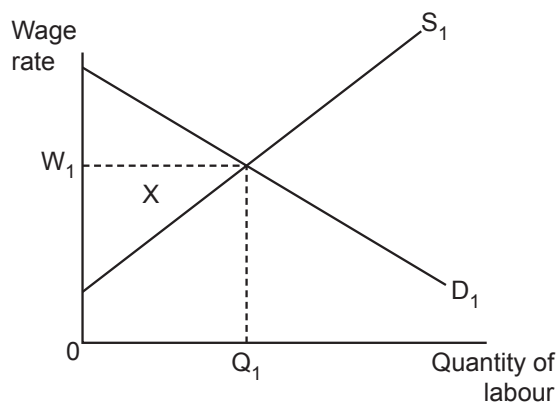
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Your answer

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Your answer

[1]

11

- 20** A zoo charges £29.17 + VAT (payable at 20%) for admission, giving a total price of £35. The monthly running costs of the zoo are £675 000, with 30 000 visitors each month. In July 2020 the government announced a temporary reduction in the rate of VAT charged to zoos from 20% to 5%. If the zoo continued to price entrance at £35 and visitor numbers remained constant, what would the impact on its profit be?

- A** Increases by £124 900
- B** Increases by £200 100
- C** Increases by £325 000
- D** Remains unchanged

Your answer

[1]

- 21** What is the most likely impact of an exchange rate appreciation?

- A** Aggregate demand shifts to the right
- B** Contraction along the aggregate demand curve
- C** Long run aggregate supply shifts to the left
- D** Short run aggregate supply shifts to the right

Your answer

[1]

- 22** In March 2020, India announced it was increasing its fuel excise duty. What type of tax is this?

- A** Direct
- B** Indirect
- C** Progressive
- D** Proportional

Your answer

[1]

11

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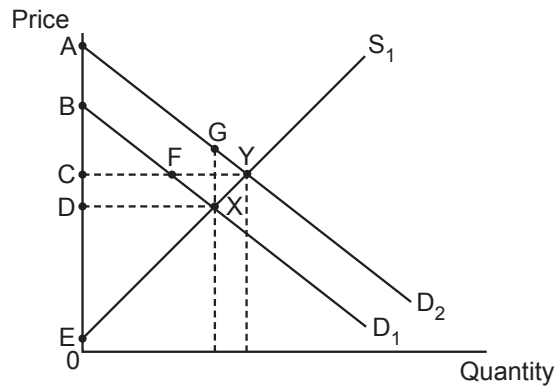
- A Direct
- B Indirect
- C Progressive
- D Proportional

Your answer

[1]

12

- 23 Equilibrium in a market changes from X to Y in the diagram below. What area represents the new consumer surplus?



- A AYC
B BXD
C CYE
D CFXD

Your answer

[1]

- 24 A firm manufactures and sells a limited edition watch at a price of £1000. Within minutes of launching the product online it has sold all its watches, with hundreds of potential customers left disappointed. What has occurred here?

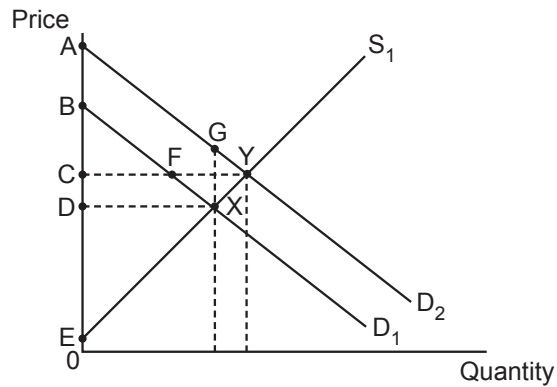
- A Ceteris paribus
B Disequilibrium
C Free rider problem
D Negative externalities of consumption

Your answer

[1]

12

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- B BXD
- C CYE
- D CFXD

Your answer

[1]

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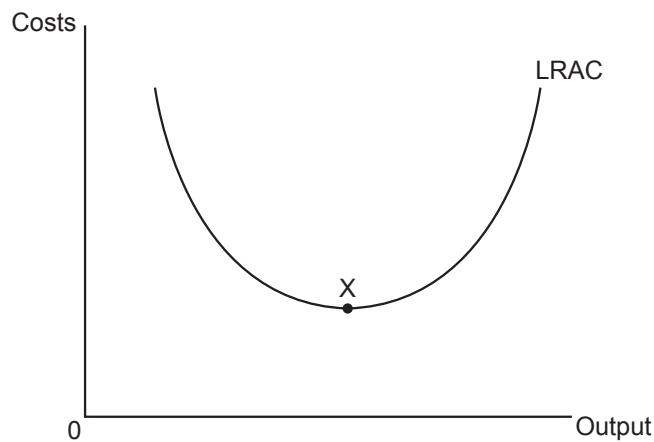
- A Ceteris paribus
- B Disequilibrium
- C Free rider problem
- D Negative externalities of consumption

Your answer

[1]

3

- 3 What does point X on the diagram below represent?



- A Constant returns to scale
- B Diseconomies of scale
- C Economies of scale
- D Minimum efficient scale

Your answer

[1]

- 4 In 2020 Sony announced the launch of the PlayStation 5 games console. It was estimated that at a price of £500 Sony would sell 87 million consoles. Analysts suggested these sales would increase to 122 million if the price was reduced to £400. What is the price elasticity of demand?

- A -2.01
- B -1.61
- C -0.50
- D 0.71

Your answer

[1]

4

- 5 Many developing nations face the problem of a poorly developed financial sector. This is partly because individuals are unwilling to save their money in financial institutions. Some are worried that the financial institutions may go bankrupt, which will result in them losing their savings. How can a central bank help to overcome this problem?

- A Act as a lender of last resort
- B Issue banknotes and coins
- C Maintain price stability
- D Manage the government's borrowing

Your answer

☐

[1]

- 6 What is likely to be the most effective policy solution to overcome the market failure caused by the existence of positive externalities of production?

- A Competition policy
- B Regulation
- C Subsidy
- D Taxation

Your answer

☐

[1]

- 7 Which form of economic integration describes a situation in which there is free trade between members who set common external tariffs but each have different currencies?

- A Customs union
- B Economic union
- C Free trade area
- D Monetary union

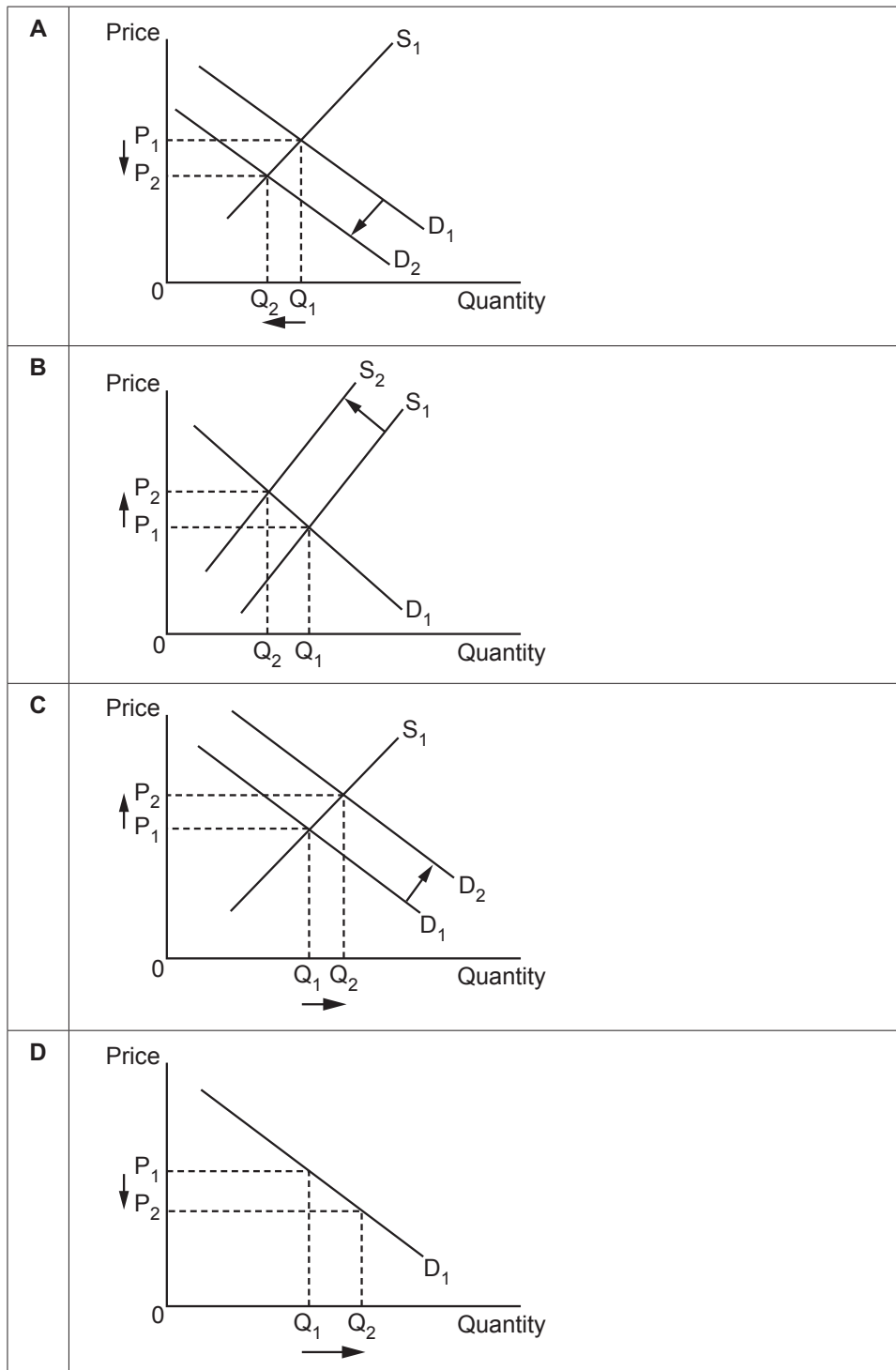
Your answer

☐

[1]

6

- 9 Which of the diagrams below is most likely to explain the impact on the market for domestic campsites of the government imposing a tax on individuals who choose to fly abroad?



Your answer

[1]

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2-MARK QUESTIONS

15 questions in this booklet

2

SECTION A

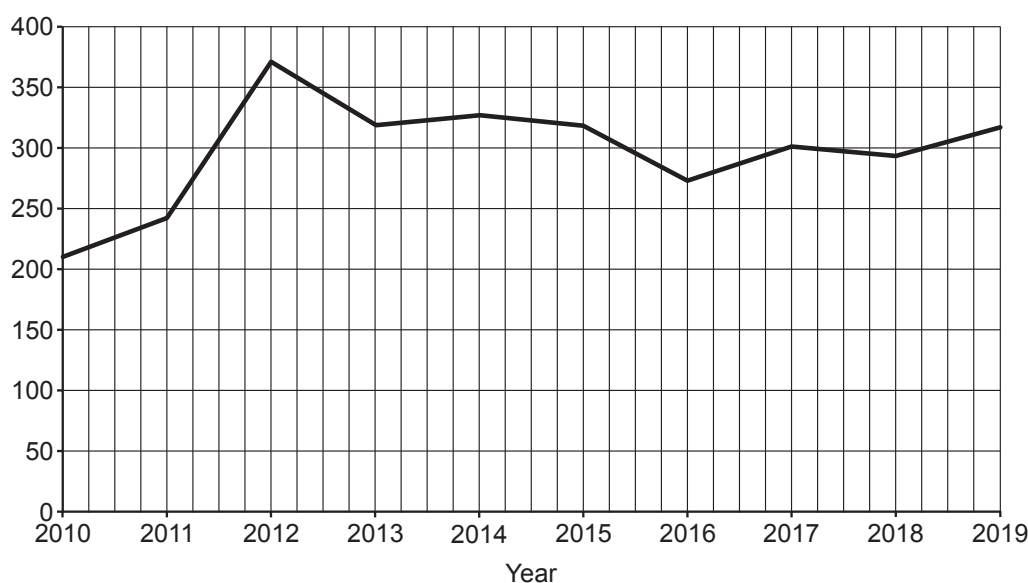
Read the stimulus material and answer **all** the parts of Question 1.

Wage differentials in the USA

Research shows the ratio of Chief Executive pay ('remuneration') to employee remuneration in the USA has increased significantly since 2010 (see **Fig. 1**). In 2019, Chief Executives at the largest 350 firms in the USA earned 320 times more than a typical employee.

Fig. 1

Chief Executive-to-employee remuneration ratio (USA), 2010–2019



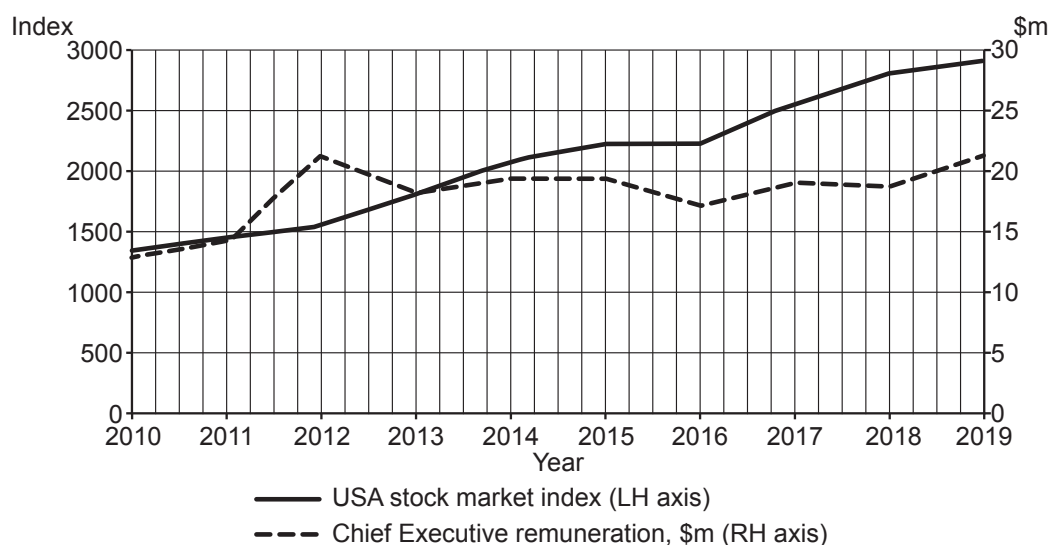
Source: Economic Policy Institute

Chief Executives earned an average of \$21 million in 2019, a 14% increase since 2018. In that year, the US stock market price index, which shows changes in the share prices of US companies also rose (see **Fig. 2**).

5

Fig. 2

Chief Executive remuneration and stock market performance (USA), 2010–2019



Source: Economic Policy Institute

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3

This growth in Chief Executive remuneration has happened while wage growth for most Americans has remained relatively low. To distract attention from their remuneration, some Chief Executives have taken a voluntary cut in salary. However, this approach is criticised as much of their remuneration comes from share options (the right to buy shares at set prices) and bonuses. Other policies that may help reduce the remuneration gap between Chief Executive and employee have been suggested, including: 10

- reinstating a higher marginal income tax rate at the very top income levels;
- setting corporation tax rates higher for firms that have higher ratios of Chief Executive-to-employee remuneration; 15
- allowing greater use of 'say on pay' which allows a firm's shareholders to vote on Chief Executive remuneration.

Society is increasingly recognising who are the essential workers. They harvest our food, stock our grocery shelves and deliver goods all over the country. They look after our children and care for us when we are ill. They are also amongst the lowest-paid workers in the country. Why is this? 20
And, in contrast, why are relatively non-essential jobs, in such areas as entertainment and sport, so well paid?

The answer to these questions is not clear. The traditional economics answer would be to consider the concepts of demand and supply. Many of the essential occupations are easy to enter. For example, a cleaner might not require specialist knowledge or training. 25

A different answer could be 'scalability'. A cleaner, however skilled at their job, can only clean one building at a time. However, an entertainer can provide value to millions of people at the same time, thanks to television or the Internet. In many jobs, such as those in entertainment or sport, it is difficult to measure marginal physical productivity and so pay is set in a seemingly random way, often based on power. 30

This 'power differential' is a new area of research to explain wage differentials. This suggests that skill levels are not good predictors of wage levels, as there are big differences in wage between workers who do the same job.

In the USA, business leaders and politicians have worked together to weaken trade unions, oppose minimum wage legislation and remove labour market restrictions. Marshall Steinbaum, an economist at the University of Utah, suggests that the decline in workers' rights and bargaining power of trade unions alongside the greater power of employers is the main reasons for growing wage differentials. He says that "[The power] American bosses have to dictate take-it-or-leave-it terms to workers is the core reason our 'essential' workforce are underpaid." 35

Source: Adapted from *The Washington Post* (6/4/20) & *Pressenza* (19/8/20)

4

1 (a) Refer to Fig. 2.

- (i) Describe the relationship between Chief Executive remuneration and stock market performance between 2010 and 2019.

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..... [2]

- (ii) Explain why this relationship may exist.

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..... [2]

- (b) A marginal income tax rate is one example of the marginal principle used by economists.

Explain what is meant by the economic concept of 'the margin'.

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..... [2]

22

- 31

Explain, using the information in **Extract 1**, why private car journeys may be overconsumed in the free market.

[2]
- 32

Explain, using the information in **Fig. 1.2**, what has happened to the price of train tickets between 2004 and 2020.

[2]
- 33*

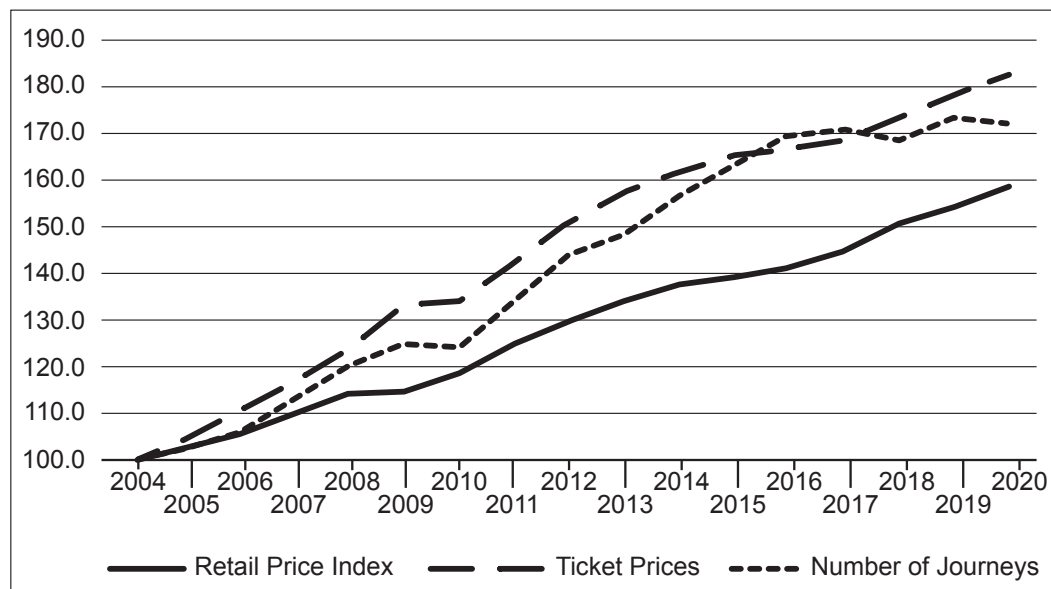
Evaluate, using an appropriate diagram(s) and the information in **Extract 1**, the extent to which Trade Unions are responsible for labour market failure.

[15]

19

Fig. 1.2

Index of train prices and journey numbers 2014–2020 (Base Year 2014 = 100)



One of the biggest costs faced by train operating companies is the wages of their drivers, who have seen above inflation pay rises for many years. Trade Unions play a significant role in wage negotiations in this industry, with London Underground being a good example of this. Between 2010 and 2020, more than 36 000 days were lost due to strike action on the London Underground, with drivers and station staff striking over a range of issues including pay, working patterns and conditions. Some argue this intervention by unions has resulted in tube drivers earning well above their marginal revenue product of labour, with the starting pay in excess of £55 000 in 2020 almost double the average wage in the UK.

15

However, unions state the high wages simply reflect the demanding nature of the job, with drivers having significant responsibilities for public safety as well as having to work unsociable hours. They believe their intervention is necessary to protect their members from otherwise being exploited and underpaid by Transport for London.

20

The rail industry is one of only a handful where unions retain significant power, owing to the size of their membership and the fact that their members' jobs are critical to keeping the economy moving. Whilst in the 1970s more than two thirds of workers in the UK were members of a union, this has fallen to less than 25% in 2020. Alongside the impact of globalisation, this has meant the influence of trade unions has declined, with their bargaining power remaining high in only a limited number of occupations primarily in the public sector.

25

22

- 31 Explain, using the information in **Extract 1**, why private car journeys may be overconsumed in the free market.

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..... [2]

- 32 Explain, using the information in **Fig. 1.2**, what has happened to the price of train tickets between 2004 and 2020.

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..... [2]

- 33* Evaluate, using an appropriate diagram(s) and the information in **Extract 1**, the extent to which Trade Unions are responsible for labour market failure. [15]

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21

Extract 3**The financial sector**

Whilst the 2020 Trade and Cooperation Agreement between the UK and EU to an extent reassured domestic car manufacturers that they would continue to be able to export cars to the EU tariff-free, the agreement did little to facilitate access to the EU's single market for UK financial services firms. In particular, financial services firms lost their 'passporting' rights, which previously enabled them to sell their services into the EU without the need for additional regulatory clearances. Without such rights firms would be forced to comply with the requirements of different member states, which is likely to increase complexity and cost. Whilst it is hoped that over time equivalent agreements could be reached, there is no guarantee these will be long lasting, which has already caused some firms to relocate part of their operations away from London to places like Paris or Frankfurt.

This poses a major threat to the UK economy given the significant contribution financial services make to the UK's exports of services, which totalled £297.4bn in 2018. The current account surplus enjoyed in the trade in services is important in helping to offset the significant deficit on the current account in the trade in goods. Fig. 3.1 illustrates how the UK's exports of services breaks down by sector.

Fig. 3.1
UK export of services by sector, 2018

Sector	% of total UK exports in services
Financial	21.0
Insurance and pension services	6.6
Intellectual property	5.5
Other business	37.3
Telecommunication, computer and information services	7.5
Transport	9.9
Travel	12.2

One way in which the UK government could act to ensure the financial services sector remains competitive would be to deregulate. This could be achieved by, for example, removing the cap on bankers' bonuses imposed by the EU or looking again at capital adequacy requirements – the proportion of a bank's deposits they are required to keep as liquid assets. Such deregulation could fulfil former Chancellor Rishi Sunak's goal of making sure that "the City of London remains the most dynamic place to do financial services anywhere in the world". However, some suggest deregulation could create the very type of systemic risk that greater financial regulation was designed to overcome following the global financial crisis of 2008.

26

37 Using the data in **Fig. 3.1** and the information in **Extract 3**, calculate the value of UK financial services exports in 2018.

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..... [2]

38* Evaluate, using the information in **Extract 3**, the extent to which deregulation of financial services would benefit the UK economy. [15]

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2

SECTION A

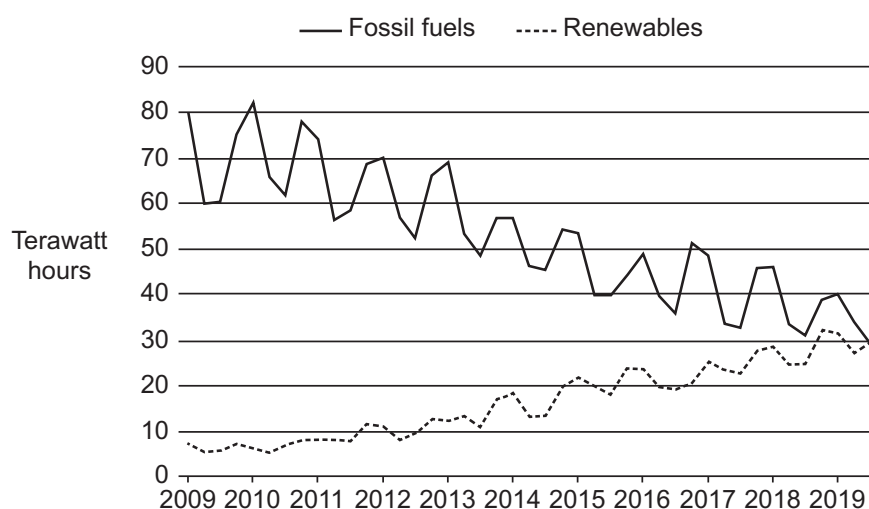
Read the following stimulus material and answer **all** parts of Question 1 which follow in this section.

Changing consumer trends in the UK?

Renewable energy sources, including wind, solar power and biomass, now provide more electricity to UK homes and businesses than fossil fuels, such as coal and gas. This was first achieved in the third quarter of 2019, see Fig. 1.

Fig. 1

UK electricity generation per quarter (measured in Terawatt hours)



Source: CarbonBrief

- 5 Coal is now used for less than 1% of electricity generation in the UK, with only four coal-powered plants remaining, ahead of a ban in 2025. Gas is the largest fossil fuel (38%) in the UK energy system. In terms of renewable energy sources, wind power is the UK's largest, making up 20% of the UK's electricity, followed by 12% from biomass and 6% from solar power. Nuclear power provides the remainder of the UK's electricity.

- 10 Kwasi Kwarteng, the government minister for energy and clean growth, said the renewables record is, "...yet another milestone on our path towards ending our contribution to climate change altogether by 2050. We've cut emissions by 40% while growing the economy by two thirds since 1990. Now, with more offshore wind projects on the way at record low prices we plan to go even further and faster in the years to come."

- 15 One of the largest firms in the UK is Shell, a multinational company. It provides 10% of the UK's oil and gas, employs about 6,000 people and serves over 5 million customers every week at more than 1,000 fuel service stations. It has the third largest number of fuel service stations, behind Tesco and BP.

- 20 However, Shell now faces the prospect of no more petrol cars, lorries running on liquid gas, and solar or wind powered homes and businesses. Even the fuel service station is changing, with most now seen as a retail outlet where people can do their food shopping, pick up a parcel or drink a coffee. Managers at Shell have taken all of these changes very seriously, as they attempt to reinvent the company which is also faced with new climate change targets. Some experts have compared the changes to a new industrial revolution.

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25 Shell's managers have already taken some big decisions. Shell has bought a company which makes electric vehicle (EV) charging points for homes and workplaces. It has also bought a supplier of electricity and gas in the UK. Shell's managers see a time when the business will supply all of an individual's energy needs.

30 Shell is trying to take the lead in EV charging points for battery-powered cars. At present, less than 2% of cars on UK roads are battery-powered. However, by 2040 a third of all vehicles could be electric. Shell believes it is well placed to take advantage of this growing market, as it has already launched a 'rapid recharge service' which uses 100% renewable energy. It announced the opening of its 50th EV charging station in October 2019. Given its large number of fuel service stations and its strong position in the market, Shell plans to install hundreds more charging stations around the UK.

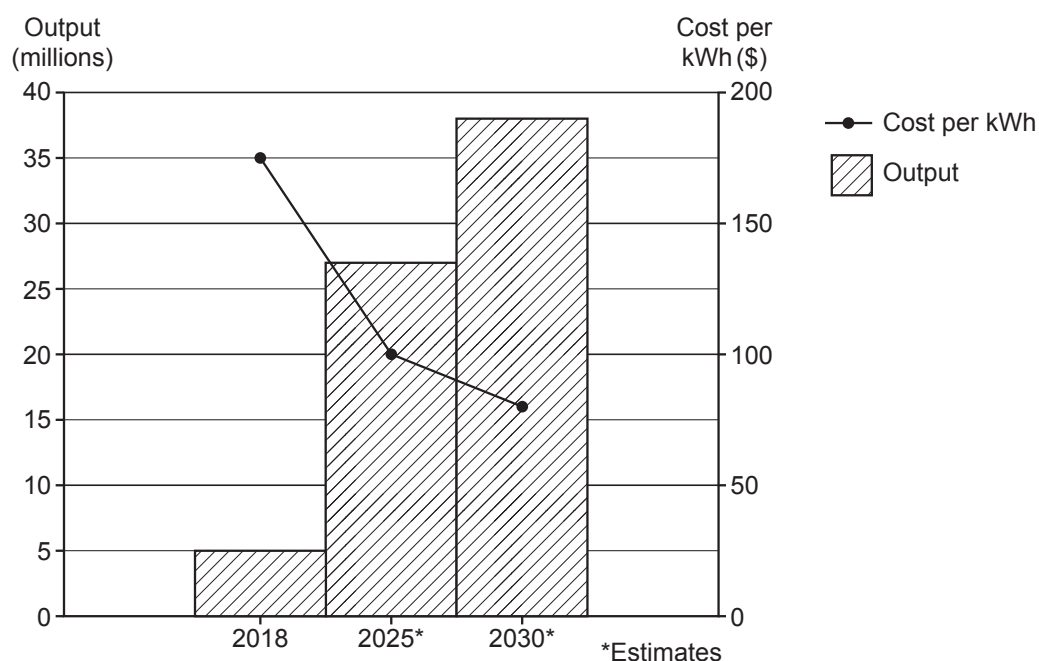
35 The growth in EV charging stations will be necessary if the UK government's 'Road to Zero' strategy, to ban the sale of new petrol cars by 2030, is to be successful. As part of this strategy, more taxes may be imposed to change the marginal private cost of using petrol cars, so that the price paid is closer to the marginal social cost inflicted on society. Once the price of battery-powered cars falls to a level closer to that of petrol cars, the use of a subsidy may also be beneficial.

40 One of the largest costs of running a petrol car is the petrol. The demand for petrol appears to be significantly price inelastic. A 2019 review of over 100 pieces of research about the price elasticity of demand for petrol found it to have a value of -0.26 in the short run and -0.58 in the long run.

45 Another limit on the growth of battery-powered cars is the cost of producing the batteries. Many experts say that a battery-powered car cannot be price competitive until the cost of a battery falls below \$100 per kilowatt hour (kWh), see Fig. 2.

Fig. 2

Global car battery production



Source: Daily Telegraph

Some experts argue that the structure of this market will affect progress as, along with the energy and power generation markets, it is really a natural monopoly.

4

- 1 (a) Explain what is meant by the term 'subsidy'.

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- (b) "...more taxes may be imposed to change the marginal private cost of using petrol cars, so that the price paid is closer to the marginal social cost inflicted on society." **Lines 36–38**

Explain, using an appropriate diagram, how this could be achieved.

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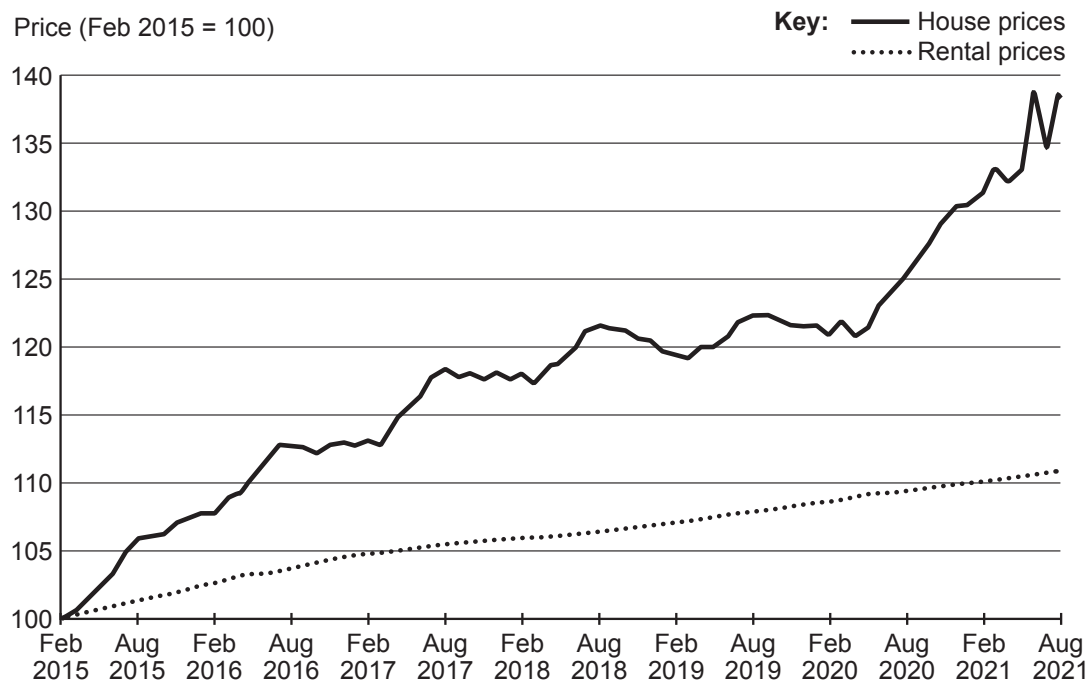
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Is the UK housing market in crisis?

Between August 2020 and August 2021, average house prices in the UK rose from £239 000 to £280 825. 2021 was a record year for house sales in the UK. Very high demand continued, with many in the market saying that there is considerable shortage in supply. This prompted predictions that prices would continue to rise as they had since the start of 2020. (see Fig. 1).

Fig. 1
UK average house and rental price index



Partly due to competitive supply, trends in the market for houses also affected those wanting to rent properties. Record demand in 2021 for rental properties outside of London forced average rental prices up by 4.2%. At the same time, average rents in London fell by 7.8% in a year.

5

Converting empty shops into homes has been proposed as one way to increase the supply of housing and tackle the shortage of housing in the UK. A change to legislation in 2021 means that planning permission is no longer required to convert commercial buildings, such as shops, restaurants and gyms, into homes. However, critics highlight research which suggests that 89% of commercial buildings in the London Borough of Barnet could be lost due to the new legislation.

10

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One private sector retailer taking advantage of changes in the law is John Lewis plc. During 2020 and 2021, John Lewis plc announced the permanent closure of 16 of its 50 UK department stores. In July 2021 it announced plans to convert some of its closed stores to create 100 000 new homes.

15

The City of London Corporation is the public sector organisation responsible for managing the historic centre of London, known as 'The Square Mile'. It is responding to housing shortages by planning to convert empty office space into 1500 homes.

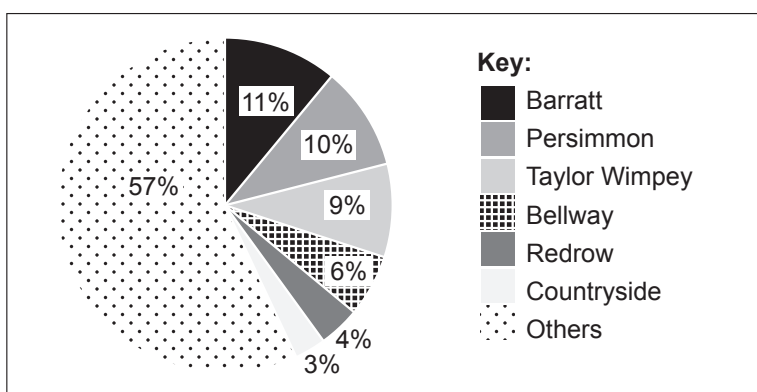
Regulations mean that all new homes must be of a high quality and meet legal space standards and building regulations. However, concerns have been raised about many new developments. Some politicians have complained that while more homes are needed, the necessary infrastructure (such as roads, schools, and doctors) will not follow.

20

There are also worries about the concentration of power in the housebuilding industry (see Fig. 2). In 2019, four of the UK's largest housebuilders – Barratt, Countryside, Persimmon and Taylor Wimpey had a relatively large market share. Some economists and politicians suggested these companies were acting as a cartel, deliberately slowing down construction and controlling competition.

25

Fig. 2
Market share of UK housebuilders – 2019



According to the House of Lords' Economic Affairs Select Committee, "The UK's big developers [housebuilders] have become far too powerful with the result that profit margins can be as high as 30%." Instead of competing on quality and price, each housebuilder focuses on separate geographical locations giving potential house buyers little choice. As smaller housebuilding firms continue to go out of business, six of the largest housebuilders own more than one million sites ready for new building.

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(a) Explain what is meant by ‘competitive supply’.

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(b) Explain, using an appropriate diagram, the situation in the housing market described in **lines 1–3**.

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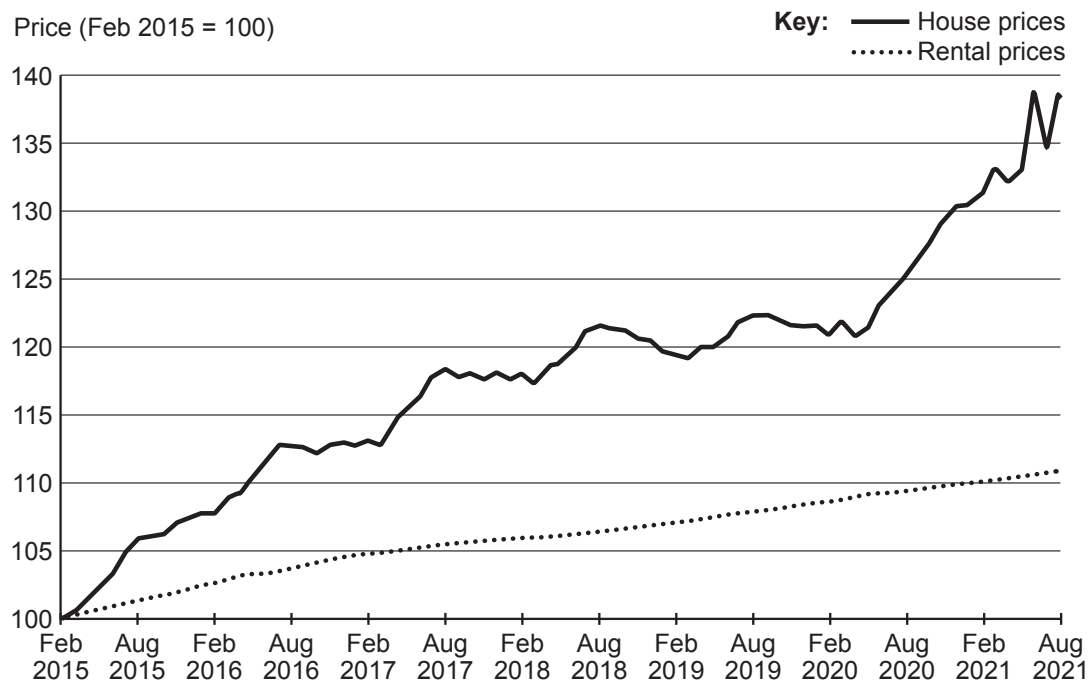
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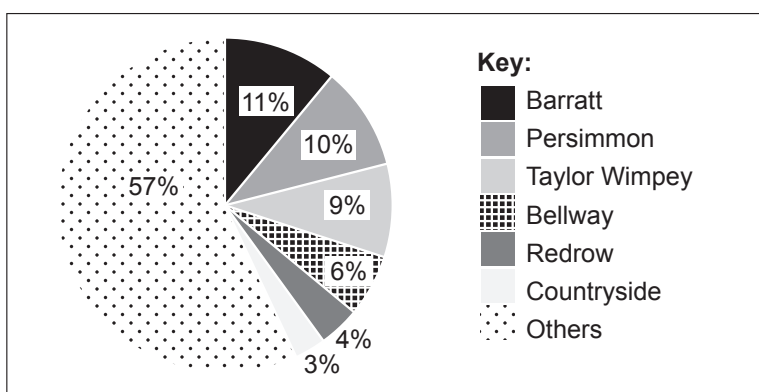
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(c) Refer to Fig. 1.

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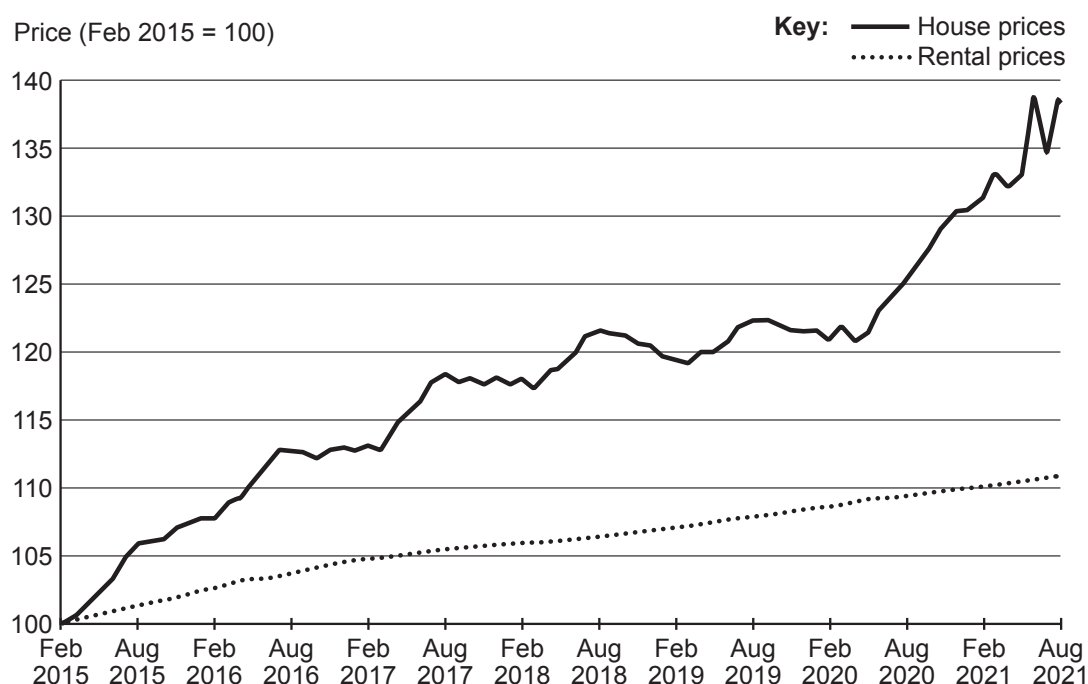
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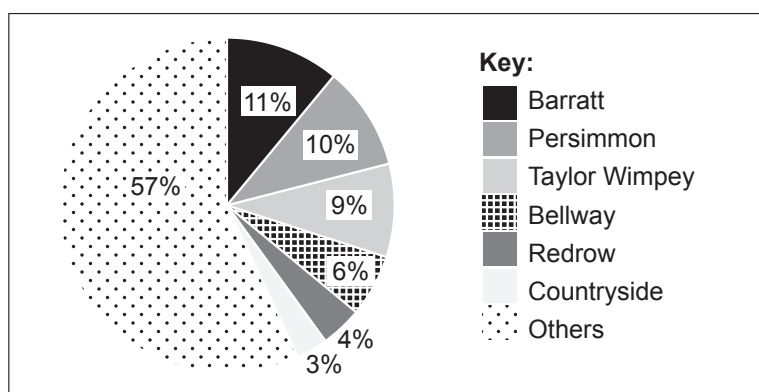
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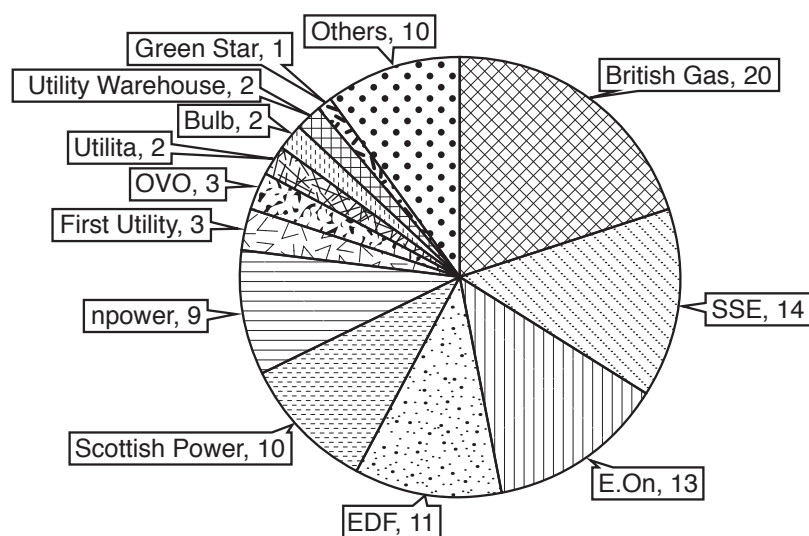
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For the 600m Africans living without access to power, fuel poverty is a socio-economic barrier. The World Bank estimates that if sub-Saharan Africa's economies had dependable electricity, GDP growth across the region could be up to 2% per annum higher than current rates.

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- The energy supply market in Uganda, as in many African countries, is highly localised, with only 15% of its citizens living in homes connected to the country's energy network. The rest have to rely on arranging their own supply, increasingly using solar power. This is very different to the UK, where most of the population are customers of one of the large national energy suppliers (see Fig. 1).

Fig. 1 – UK energy suppliers' market share, 2018 (%)



Source: OFGEM

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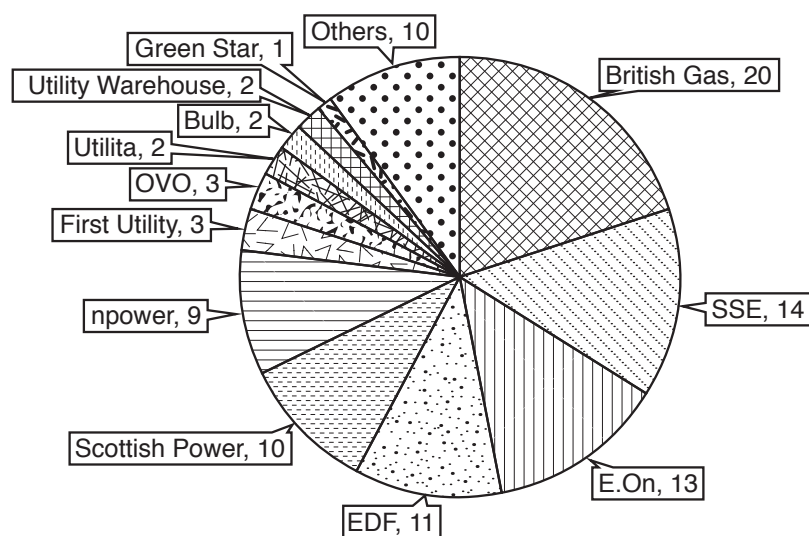
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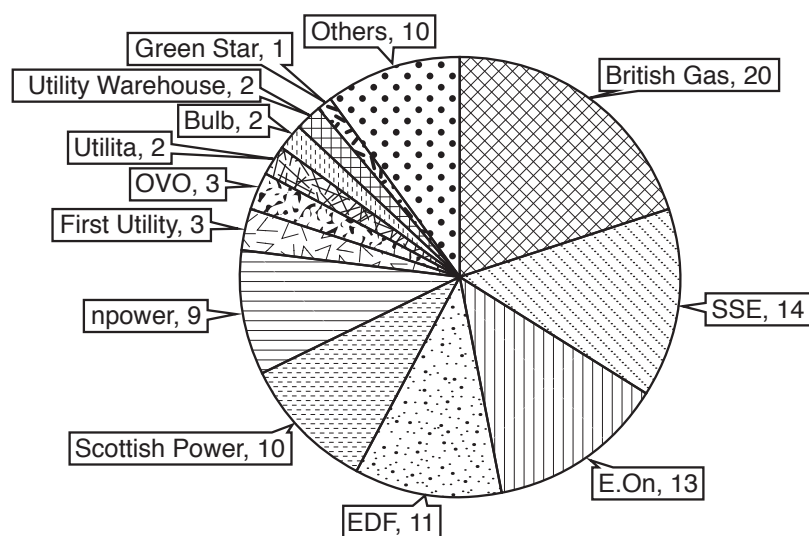
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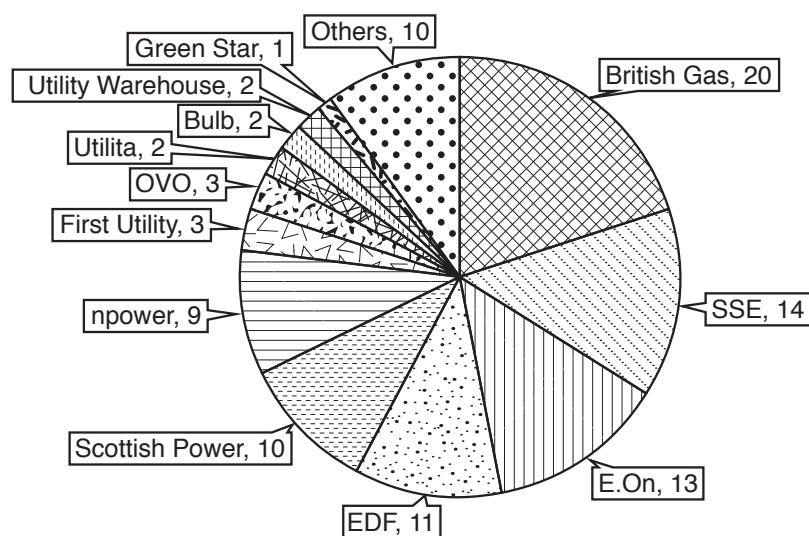
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- 35 If Shell hopes to gain a control in the market it will need to compete against a former rival. The French firm, Engie, has taken the most decisive step into Africa's home solar market, with the acquisition of Ugandan-based Fenix International. Fenix supplies power to around 250 000 homes in Uganda, through the solar kits it sells in partnership with a mobile network provider.
- 40 The popularity of the Fenix home energy system means that the company is growing. It plans to expand into other countries, to reach millions more people. "We intend to be in multiple markets across eastern, southern and western Africa," said Chief Executive, Lyndsay Handler. "It's still amazing to me that so many people in Uganda do not have access to power. We provide a decentralised, affordable home system that can completely transform lives. An opportunity to rethink the way that we can achieve universal access to energy," she said.
- 45 "Beyond wanting to have an impact, we have always wanted to prove to the world that you can have a positive impact and deliver commercial returns. There's an underlying drive to show that this is not just charity. You can build commercial returns in Africa. We want to be part of a story that encourages others to see Africa as a commercial market. There are entrepreneurial people, with ideas and opportunities. They need investment, not just handouts," she said.
- 50 One Fenix customer for the past three years is Ritah Namatovu. She is now able to work at night to support her four grandchildren, thanks to her solar energy kit. Namatovu's only concern is that the solar panel might one day be stolen from her roof. "The solar panel is an asset I now own. There are no blackouts. These panels look so small, but they are powerful," she said.

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(c) Refer to Fig. 1.

Calculate the five-firm concentration ratio in the UK energy supplier market.

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(d) (i) Refer to lines 11–13.

Calculate the income elasticity of demand for the service sector in Uganda over the last two years.

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(ii) Evaluate the impact of the increase in reliable energy supplies on the service sector in Uganda. [8]

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SECTION A

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

The UK air travel sector

The UK's biggest airline, easyJet, has reported profits before tax of £445m on revenues of almost £6bn, in the financial year ending September 2018. As the largest of the UK operators (see Table 1), easyJet faces strong competition from other 'budget' airlines (Flybe and Jet2), package holiday firms (TUI and Thomas Cook) and the previous market leader, British Airways. The recent growth of easyJet in the UK has been helped by the closure of Monarch in December 2017 and continued labour disputes at British Airways.

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Monarch	5.7	5.4	3.4

Source: CAA

Table 1 – UK Passenger numbers (million)

Across the whole of Europe, easyJet flew a record 88.5 million passengers, up 10% on the previous year, and filled 93% of its seats – meaning only 13 seats are empty on an average flight. Over the year, this 'load factor' (the percentage of seats sold across all flights) has increased by 9.8%. Typically, airlines have been satisfied with a load factor of around 75%.

Revenue per seat for easyJet in 2018 was £62, leading to a profit of £6.53 on each seat. But the airline had an additional £65m cost from "a change in approach to IT development" and a £40m cost from taking over the landing slots of the failed Air Berlin, at Tegel airport in Germany.

A growing amount of easyJet's revenue comes from what it calls 'ancillary' sources. When a customer buys a ticket online, they are also able to book hotel accommodation, car hire and airport transfers. The business aims to grow its holiday sales, offer an improved customer loyalty programme and target the business-travel market, with "a more personalised product including new business fares".

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30 Air travel is often said to be a demerit good. Politicians and economists have argued over the degree of control needed in the market and whether it is taxed enough. Most passengers entering or leaving the UK on a commercial flight will pay the Air Passenger Duty (APD) which was introduced by the UK government in 1993 for environmental reasons. However, a report published in 2018, called the 'Roadmap to decarbonising European aviation' considers other policies to reduce carbon emissions from air travel. The report criticises the lack of taxation of jet fuel across the world, saying: "Artificially cheap tickets through tax exemptions and government subsidies have propped up and propelled the industry." There is certainly a strong case for the current tax-free status of jet fuel to end.

40 Substitution, persuading travellers to switch from planes to trains, is another solution proposed in the report. It calls for, "greater competition in the rail sector in order to improve performance and drive down operating costs and fares". This suggestion would have been unthinkable 20 years ago. Today, speed and comfort have marginally improved for train travel (as there are now more fast routes). While, especially for shorter distances, flying has become increasingly unpleasant and time-consuming.

45 "It used to be a rule that, in order to compete with a one-hour flight, a train journey could be a maximum of three hours," says Mark Smith, of rail travel website Seat61. "That was allowing for an hour in the air and two for security, boarding and transfers. That simply is not the case anymore, with longer check-in and security times."

4

At the same time as taxing air travel with the APD, the UK government subsidises some routes. One example, introduced in March 2019, is on a new route between Newquay (in Cornwall) and London Heathrow. Around 170 000 passengers are predicted to use the service each year. Over the first four years, the Department for Transport and Cornwall County Council will each pay up to £1.7m, representing a subsidy of £10 per passenger for a return flight. The UK Transport Secretary at the time, Chris Grayling, said, “Maintaining and enhancing air routes that help bring together the UK is one of the key benefits. This new route will see the people of the south west profit from a direct connection into [Heathrow], building on the government’s ongoing commitment to the Newquay route, protecting choice and strengthening trade and travel opportunities for the whole UK.”

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 [2]

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- (c) Using **Table 2**, explain the concept of utility.

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16

SECTION B

Read the following extracts and answer **all** questions which follow.

Extract 1 – Public sector pay

In July 2020, the government announced it was offering significant wage increases for almost 900 000 public sector workers. Teachers and doctors received the largest annual increases, of 3.1% and 2.8% respectively. The government said that this not only rewarded public sector workers for the vital contribution they made during the Covid-19 pandemic, but would also help to attract and retain highly skilled individuals to work in the public sector.

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The announcement was not universally well received, with trade unions representing members in these professions arguing that these wage increases did not go far enough to correct for the erosion of public sector pay that took place as a result of deficit-reducing policies implemented after 2010. They also pointed to the warning from the Treasury that it will need to “exercise restraint in future public sector pay awards” as evidence that public sector workers are likely to suffer from small pay increases in the years ahead as the government seeks to reduce the near record levels of debt it incurred as a consequence of locking down the economy in response to the global pandemic. Fig. 1.1 shows what has happened to public sector wages and the price level over the past decade.

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	Average Annual Public Sector Wage	Consumer Price Index (2009 = 100)
2009	£23 296	100.0
2010	£23 868	103.2
2011	£24 284	107.9
2012	£24 752	111.0
2013	£24 908	113.7
2014	£25 272	115.5
2015	£25 584	115.5
2016	£26 000	116.3
2017	£26 416	119.4
2018	£27 092	122.3
2019	£27 976	124.5

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Fig. 1.1 – Public Sector Pay & Consumer Price Index 2009–2019

Nevertheless, at a time of rising unemployment and stagnant wages in the private sector (with private sector wages falling 1.2% in the year to May 2020), it is certainly the case that public sector employment became more financially attractive as a result of the announcement.

Whether it would result in filling shortages in the teaching and medical profession was, however, more debatable. For example, doctors require many years of specialist training, whilst nursing is often described as being a ‘vocation’, a career individuals pursue because of their love of the job. Moreover, more than half of the adult population is excluded from supplying their labour as a teacher because they do not hold an undergraduate degree. This has led some to argue that the best way to increase the supply of workers to these professions is instead by offering more substantial training subsidies and, crucially, enabling foreign workers to immigrate to fill the skills shortages. In healthcare in particular the problem is becoming urgent, with the NHS unable to cope with rapidly rising demand.

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However, it is not universally accepted that Brazil has benefited from international trade. The price volatility on world markets of the commodities it exports can be very damaging to the economy, whilst the rate of deforestation in the Amazon rainforest is often cited as an example of how emerging economies suffer from the intensive use of their natural resources. 25

31 Using the data in **Fig. 1.1**, explain what happened to public sector wages after 2010.

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32 Explain, using information in **Extract 1**, **two** reasons why the wage elasticity of supply of labour for public sector workers is likely to be inelastic.

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3-MARK QUESTIONS

1 question in this booklet

23

34 Explain, how the data in **Fig. 2.1** can be used to measure the level of income inequality in the UK.

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35 Explain, why infrastructure such as high speed rail is unlikely to be provided in a market economy without government intervention.

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4-MARK QUESTIONS

3 questions in this booklet

2

SECTION A

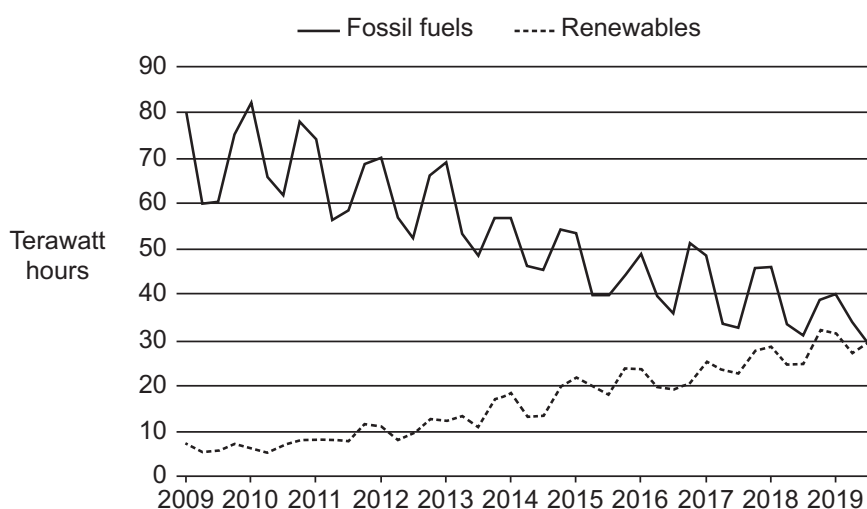
Read the following stimulus material and answer **all** parts of Question 1 which follow in this section.

Changing consumer trends in the UK?

Renewable energy sources, including wind, solar power and biomass, now provide more electricity to UK homes and businesses than fossil fuels, such as coal and gas. This was first achieved in the third quarter of 2019, see Fig. 1.

Fig. 1

UK electricity generation per quarter (measured in Terawatt hours)



Source: CarbonBrief

- 5 Coal is now used for less than 1% of electricity generation in the UK, with only four coal-powered plants remaining, ahead of a ban in 2025. Gas is the largest fossil fuel (38%) in the UK energy system. In terms of renewable energy sources, wind power is the UK's largest, making up 20% of the UK's electricity, followed by 12% from biomass and 6% from solar power. Nuclear power provides the remainder of the UK's electricity.

- 10 Kwasi Kwarteng, the government minister for energy and clean growth, said the renewables record is, "...yet another milestone on our path towards ending our contribution to climate change altogether by 2050. We've cut emissions by 40% while growing the economy by two thirds since 1990. Now, with more offshore wind projects on the way at record low prices we plan to go even further and faster in the years to come."

- 15 One of the largest firms in the UK is Shell, a multinational company. It provides 10% of the UK's oil and gas, employs about 6,000 people and serves over 5 million customers every week at more than 1,000 fuel service stations. It has the third largest number of fuel service stations, behind Tesco and BP.

- 20 However, Shell now faces the prospect of no more petrol cars, lorries running on liquid gas, and solar or wind powered homes and businesses. Even the fuel service station is changing, with most now seen as a retail outlet where people can do their food shopping, pick up a parcel or drink a coffee. Managers at Shell have taken all of these changes very seriously, as they attempt to reinvent the company which is also faced with new climate change targets. Some experts have compared the changes to a new industrial revolution.

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25 Shell's managers have already taken some big decisions. Shell has bought a company which makes electric vehicle (EV) charging points for homes and workplaces. It has also bought a supplier of electricity and gas in the UK. Shell's managers see a time when the business will supply all of an individual's energy needs.

30 Shell is trying to take the lead in EV charging points for battery-powered cars. At present, less than 2% of cars on UK roads are battery-powered. However, by 2040 a third of all vehicles could be electric. Shell believes it is well placed to take advantage of this growing market, as it has already launched a 'rapid recharge service' which uses 100% renewable energy. It announced the opening of its 50th EV charging station in October 2019. Given its large number of fuel service stations and its strong position in the market, Shell plans to install hundreds more charging stations around the UK.

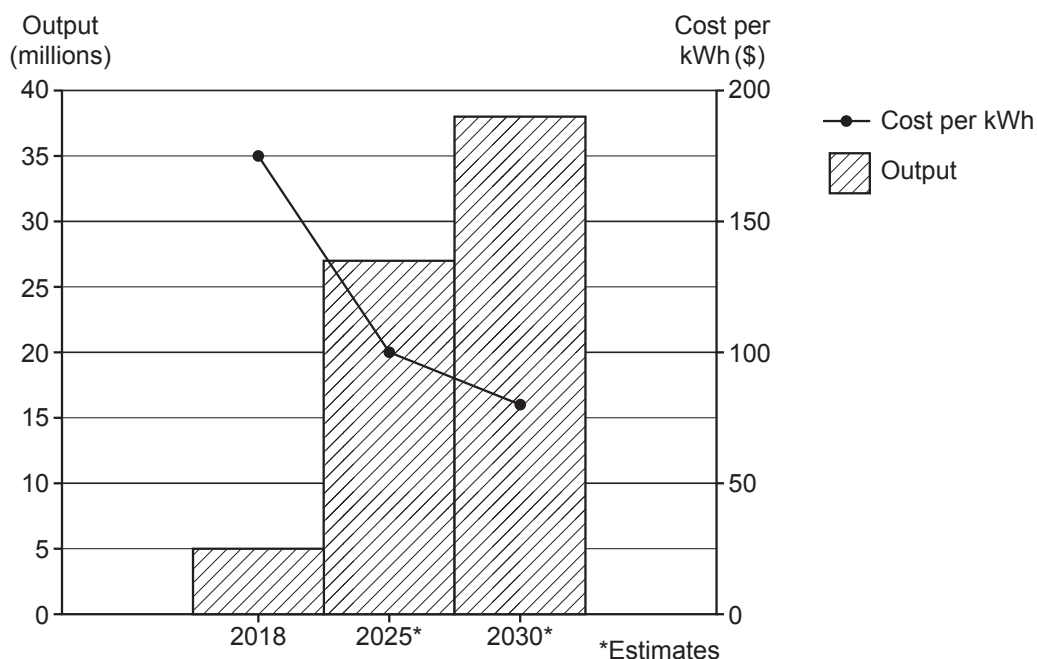
35 The growth in EV charging stations will be necessary if the UK government's 'Road to Zero' strategy, to ban the sale of new petrol cars by 2030, is to be successful. As part of this strategy, more taxes may be imposed to change the marginal private cost of using petrol cars, so that the price paid is closer to the marginal social cost inflicted on society. Once the price of battery-powered cars falls to a level closer to that of petrol cars, the use of a subsidy may also be beneficial.

40 One of the largest costs of running a petrol car is the petrol. The demand for petrol appears to be significantly price inelastic. A 2019 review of over 100 pieces of research about the price elasticity of demand for petrol found it to have a value of -0.26 in the short run and -0.58 in the long run.

45 Another limit on the growth of battery-powered cars is the cost of producing the batteries. Many experts say that a battery-powered car cannot be price competitive until the cost of a battery falls below \$100 per kilowatt hour (kWh), see Fig. 2.

Fig. 2

Global car battery production



Source: Daily Telegraph

Some experts argue that the structure of this market will affect progress as, along with the energy and power generation markets, it is really a natural monopoly.

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- 1 (a) Explain what is meant by the term 'subsidy'.

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- (b) "...more taxes may be imposed to change the marginal private cost of using petrol cars, so that the price paid is closer to the marginal social cost inflicted on society." **Lines 36–38**

Explain, using an appropriate diagram, how this could be achieved.

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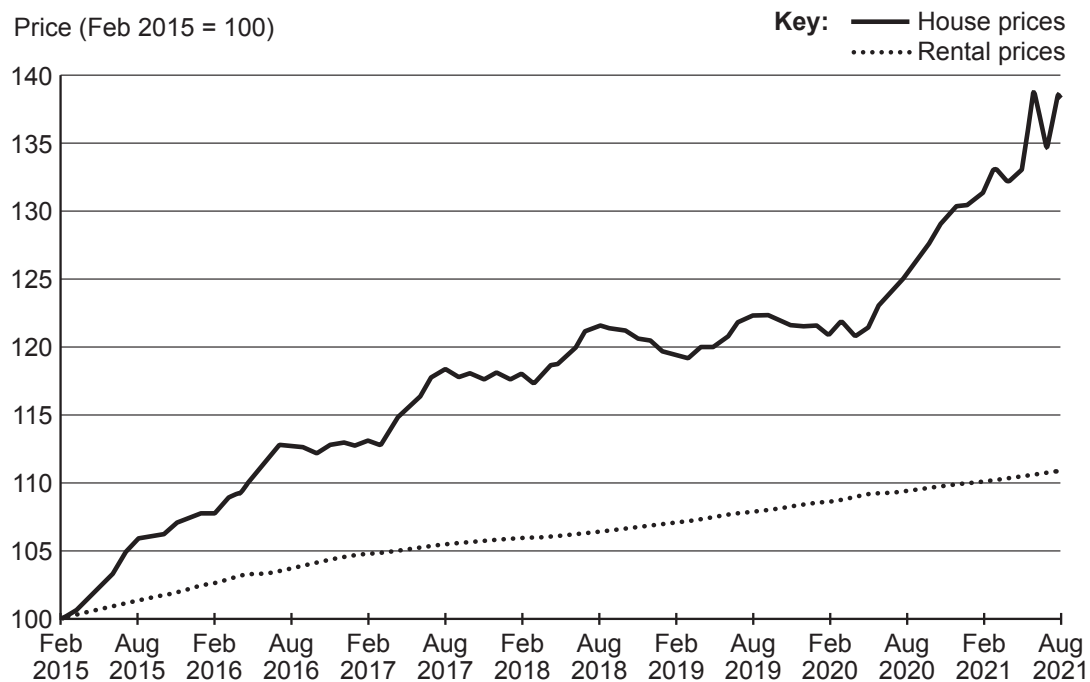
Section A

Read the stimulus material and answer **all** the parts of Question 1.

Is the UK housing market in crisis?

Between August 2020 and August 2021, average house prices in the UK rose from £239 000 to £280 825. 2021 was a record year for house sales in the UK. Very high demand continued, with many in the market saying that there is considerable shortage in supply. This prompted predictions that prices would continue to rise as they had since the start of 2020. (see Fig. 1).

Fig. 1
UK average house and rental price index



Partly due to competitive supply, trends in the market for houses also affected those wanting to rent properties. Record demand in 2021 for rental properties outside of London forced average rental prices up by 4.2%. At the same time, average rents in London fell by 7.8% in a year.

5

Converting empty shops into homes has been proposed as one way to increase the supply of housing and tackle the shortage of housing in the UK. A change to legislation in 2021 means that planning permission is no longer required to convert commercial buildings, such as shops, restaurants and gyms, into homes. However, critics highlight research which suggests that 89% of commercial buildings in the London Borough of Barnet could be lost due to the new legislation.

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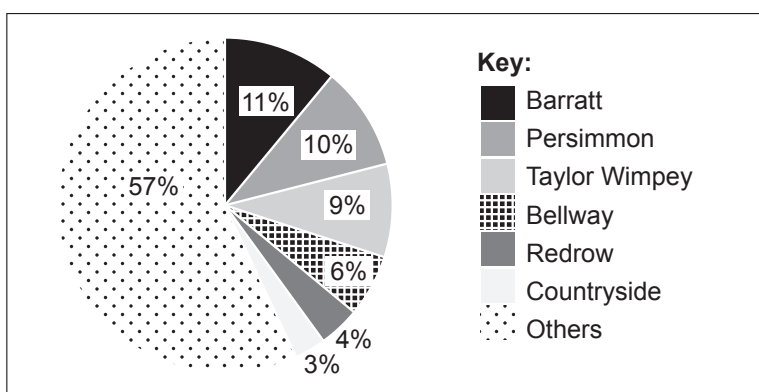
One private sector retailer taking advantage of changes in the law is John Lewis plc. During 2020 and 2021, John Lewis plc announced the permanent closure of 16 of its 50 UK department stores. In July 2021 it announced plans to convert some of its closed stores to create 100 000 new homes. 15

The City of London Corporation is the public sector organisation responsible for managing the historic centre of London, known as 'The Square Mile'. It is responding to housing shortages by planning to convert empty office space into 1500 homes.

Regulations mean that all new homes must be of a high quality and meet legal space standards and building regulations. However, concerns have been raised about many new developments. Some politicians have complained that while more homes are needed, the necessary infrastructure (such as roads, schools, and doctors) will not follow. 20

There are also worries about the concentration of power in the housebuilding industry (see Fig. 2). In 2019, four of the UK's largest housebuilders – Barratt, Countryside, Persimmon and Taylor Wimpey had a relatively large market share. Some economists and politicians suggested these companies were acting as a cartel, deliberately slowing down construction and controlling competition. 25

Fig. 2
Market share of UK housebuilders – 2019



According to the House of Lords' Economic Affairs Select Committee, "The UK's big developers [housebuilders] have become far too powerful with the result that profit margins can be as high as 30%." Instead of competing on quality and price, each housebuilder focuses on separate geographical locations giving potential house buyers little choice. As smaller housebuilding firms continue to go out of business, six of the largest housebuilders own more than one million sites ready for new building. 30

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(a) Explain what is meant by ‘competitive supply’.

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(b) Explain, using an appropriate diagram, the situation in the housing market described in **lines 1–3**.

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2

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Table 3 – Ticket prices quoted for London Gatwick to Gran Canaria (to travel on 1 June 2019)

30 Air travel is often said to be a demerit good. Politicians and economists have argued over the degree of control needed in the market and whether it is taxed enough. Most passengers entering or leaving the UK on a commercial flight will pay the Air Passenger Duty (APD) which was introduced by the UK government in 1993 for environmental reasons. However, a report published in 2018, called the 'Roadmap to decarbonising European aviation' considers other policies to reduce carbon emissions from air travel. The report criticises the lack of taxation of jet fuel across the world, saying: "Artificially cheap tickets through tax exemptions and government subsidies have propped up and propelled the industry." There is certainly a strong case for the current tax-free status of jet fuel to end.

40 Substitution, persuading travellers to switch from planes to trains, is another solution proposed in the report. It calls for, "greater competition in the rail sector in order to improve performance and drive down operating costs and fares". This suggestion would have been unthinkable 20 years ago. Today, speed and comfort have marginally improved for train travel (as there are now more fast routes). While, especially for shorter distances, flying has become increasingly unpleasant and time-consuming.

45 "It used to be a rule that, in order to compete with a one-hour flight, a train journey could be a maximum of three hours," says Mark Smith, of rail travel website Seat61. "That was allowing for an hour in the air and two for security, boarding and transfers. That simply is not the case anymore, with longer check-in and security times."

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At the same time as taxing air travel with the APD, the UK government subsidises some routes. One example, introduced in March 2019, is on a new route between Newquay (in Cornwall) and London Heathrow. Around 170 000 passengers are predicted to use the service each year. Over the first four years, the Department for Transport and Cornwall County Council will each pay up to £1.7m, representing a subsidy of £10 per passenger for a return flight. The UK Transport Secretary at the time, Chris Grayling, said, "Maintaining and enhancing air routes that help bring together the UK is one of the key benefits. This new route will see the people of the south west profit from a direct connection into [Heathrow], building on the government's ongoing commitment to the Newquay route, protecting choice and strengthening trade and travel opportunities for the whole UK."

- 1 (a) Refer to **line 11**. Calculate, using information from the stimulus material, the average cost of a seat on an easyJet plane in 2018.

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- (b) Refer to **lines 14–18**. Explain, using evidence from the stimulus material, what is meant by joint demand.

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- (c) Using **Table 2**, explain the concept of utility.

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- (d) “There is certainly a strong case for the current tax-free status of jet fuel to end.” (lines 36–37)

Explain, using a diagram, the impact on the level of consumer surplus if jet fuel is taxed by the UK government.

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- (e) Evaluate **two** factors which may determine the value of the price elasticity of demand for air travel. [8]

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8-MARK QUESTIONS

7 questions in this booklet

25

- 36** Explain, using the information in **Extract 2**, the impact on the UK economy of introducing export subsidies to the automotive industry in the UK.

[8]

[8]

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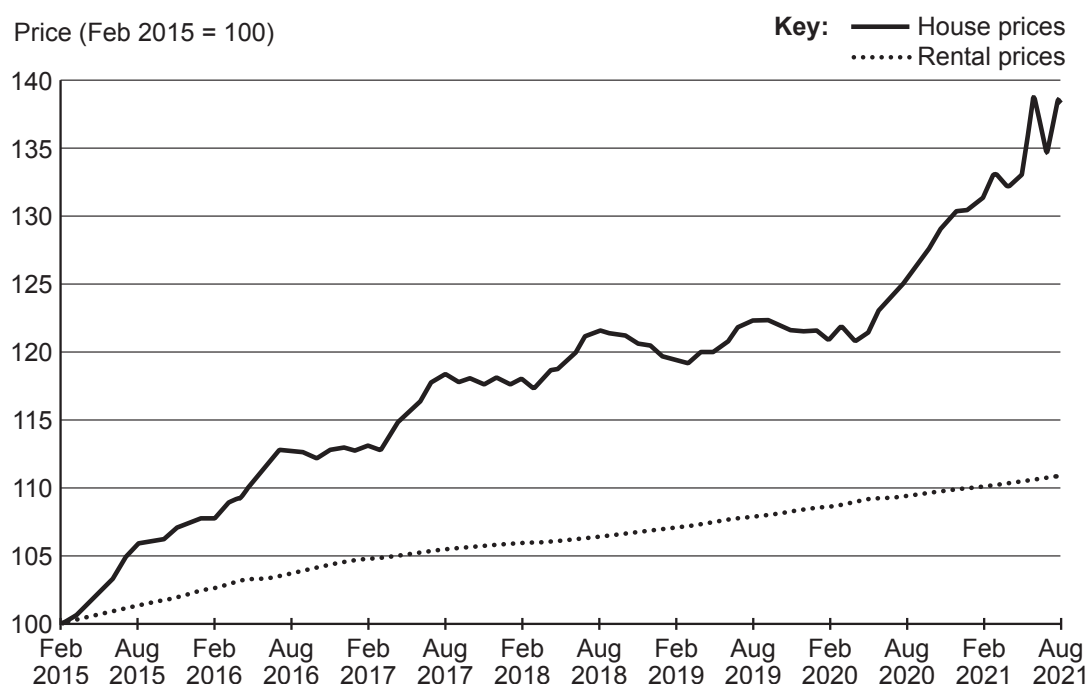
Section A

Read the stimulus material and answer **all** the parts of Question 1.

Is the UK housing market in crisis?

Between August 2020 and August 2021, average house prices in the UK rose from £239 000 to £280 825. 2021 was a record year for house sales in the UK. Very high demand continued, with many in the market saying that there is considerable shortage in supply. This prompted predictions that prices would continue to rise as they had since the start of 2020. (see Fig. 1).

Fig. 1
UK average house and rental price index



Partly due to competitive supply, trends in the market for houses also affected those wanting to rent properties. Record demand in 2021 for rental properties outside of London forced average rental prices up by 4.2%. At the same time, average rents in London fell by 7.8% in a year.

5

Converting empty shops into homes has been proposed as one way to increase the supply of housing and tackle the shortage of housing in the UK. A change to legislation in 2021 means that planning permission is no longer required to convert commercial buildings, such as shops, restaurants and gyms, into homes. However, critics highlight research which suggests that 89% of commercial buildings in the London Borough of Barnet could be lost due to the new legislation.

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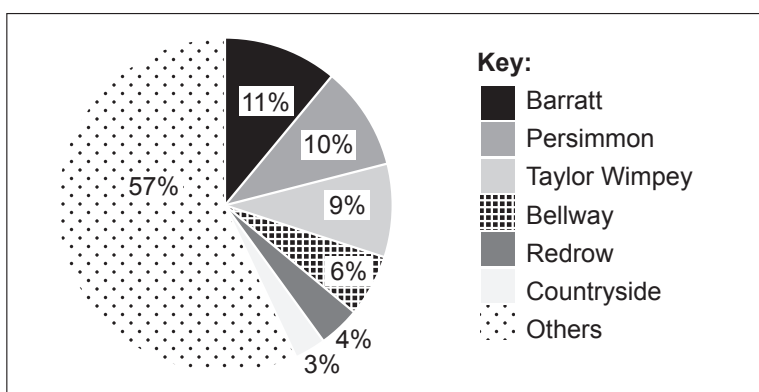
One private sector retailer taking advantage of changes in the law is John Lewis plc. During 2020 and 2021, John Lewis plc announced the permanent closure of 16 of its 50 UK department stores. In July 2021 it announced plans to convert some of its closed stores to create 100 000 new homes. 15

The City of London Corporation is the public sector organisation responsible for managing the historic centre of London, known as 'The Square Mile'. It is responding to housing shortages by planning to convert empty office space into 1500 homes.

Regulations mean that all new homes must be of a high quality and meet legal space standards and building regulations. However, concerns have been raised about many new developments. Some politicians have complained that while more homes are needed, the necessary infrastructure (such as roads, schools, and doctors) will not follow. 20

There are also worries about the concentration of power in the housebuilding industry (see Fig. 2). In 2019, four of the UK's largest housebuilders – Barratt, Countryside, Persimmon and Taylor Wimpey had a relatively large market share. Some economists and politicians suggested these companies were acting as a cartel, deliberately slowing down construction and controlling competition. 25

Fig. 2
Market share of UK housebuilders – 2019



According to the House of Lords' Economic Affairs Select Committee, "The UK's big developers [housebuilders] have become far too powerful with the result that profit margins can be as high as 30%." Instead of competing on quality and price, each housebuilder focuses on separate geographical locations giving potential house buyers little choice. As smaller housebuilding firms continue to go out of business, six of the largest housebuilders own more than one million sites ready for new building. 30

6

- (d) "A change to legislation in 2021 means that planning permission is no longer required to convert commercial buildings...into homes." **Lines 9–11.**

Evaluate, using evidence from the stimulus material, the effectiveness of reducing regulation, such as planning permission, in order to increase the supply of housing and tackle the shortage of housing in the UK.

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38 Evaluate, using the information in **Extract 3**, whether firefighter pay is likely to increase.

[8]

END OF QUESTION PAPER

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SECTION A

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

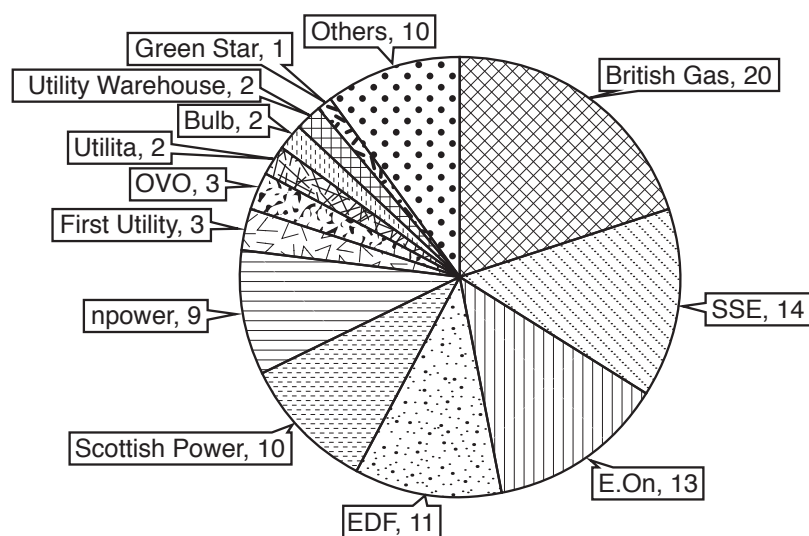
A bright future in Uganda

- Headmaster Samuel Mukisa is one of millions of people in Uganda who are plugging into the global solar-power boom. As his students study, a single rooftop solar panel generates power. It is a solar storage system which costs Mukisa a daily rate of 15 cents. The average Ugandan earns as little as \$1.50 (£1.14) a day. He pays his bill each fortnight and will do so for another year. When the payment plan is completed, Mukisa intends to upgrade to a second solar panel, so another class of students can shine.

For the 600m Africans living without access to power, fuel poverty is a socio-economic barrier. The World Bank estimates that if sub-Saharan Africa's economies had dependable electricity, GDP growth across the region could be up to 2% per annum higher than current rates.

- Uganda, with a population of 42m, has one of the youngest populations on average in the world, with 7 out of 10 people under the age of 25. Incomes in the country have increased by 26% in the last two years. The service sector has grown from 32% of the economy in 1990 to 55% in 2018, with a 15% expansion in the last two years. Today, it is estimated that 44% of Ugandans use the Internet, 70% have a mobile phone and 6% use social media. The growing demand for energy in Uganda is clear. Nevertheless, away from large cities, many individuals still operate in a barter economy. Rural agriculture based areas are still very common. However, their contribution to GDP is now only 24% of the total, down from 56% in 1990; a further reflection of the developing nature of the economy.
- The energy supply market in Uganda, as in many African countries, is highly localised, with only 15% of its citizens living in homes connected to the country's energy network. The rest have to rely on arranging their own supply, increasingly using solar power. This is very different to the UK, where most of the population are customers of one of the large national energy suppliers (see Fig. 1).

Fig. 1 – UK energy suppliers' market share, 2018 (%)



Source: OFGEM

3

- 25 Uganda is at the centre of the solar energy revolution in Africa. For development organisations, including the United Nations, and socially minded investors, the opportunities are exciting. Street lights, topped with solar panels, charge up through the bright daylight hours and illuminate the streets each night. For a growing number of energy companies, the huge number of people without reliable power represents the opportunity to access a growing market.
- 30 Local start-up firms have appeared quickly, many with the backing of international companies. In 2018, one multinational energy firm, Shell, invested in three start-ups, SolarNow, SteamaCo and Husk Power Systems. These three have raised a total of \$30m from Shell and other investors. Shell's charity foundation also backs a UK-based firm, BBOX. BBOX has expanded rapidly, providing clean energy solutions and pay-as-you-go solar power. It aims to have provided home solar power systems to 20m people in Africa by 2020.
- 35 If Shell hopes to gain a control in the market it will need to compete against a former rival. The French firm, Engie, has taken the most decisive step into Africa's home solar market, with the acquisition of Ugandan-based Fenix International. Fenix supplies power to around 250 000 homes in Uganda, through the solar kits it sells in partnership with a mobile network provider.
- 40 The popularity of the Fenix home energy system means that the company is growing. It plans to expand into other countries, to reach millions more people. "We intend to be in multiple markets across eastern, southern and western Africa," said Chief Executive, Lyndsay Handler. "It's still amazing to me that so many people in Uganda do not have access to power. We provide a decentralised, affordable home system that can completely transform lives. An opportunity to rethink the way that we can achieve universal access to energy," she said.
- 45 "Beyond wanting to have an impact, we have always wanted to prove to the world that you can have a positive impact and deliver commercial returns. There's an underlying drive to show that this is not just charity. You can build commercial returns in Africa. We want to be part of a story that encourages others to see Africa as a commercial market. There are entrepreneurial people, with ideas and opportunities. They need investment, not just handouts," she said.
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(c) Refer to Fig. 1.

Calculate the five-firm concentration ratio in the UK energy supplier market.

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(d) (i) Refer to lines 11–13.

Calculate the income elasticity of demand for the service sector in Uganda over the last two years.

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(ii) Evaluate the impact of the increase in reliable energy supplies on the service sector in Uganda. [8]

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24

- 36** Evaluate, using the information in Extract 2, whether the likely objective of a private sector water or electricity firm justifies taking them into public ownership.

[8]

[8]

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2

SECTION A

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

The UK air travel sector

The UK's biggest airline, easyJet, has reported profits before tax of £445m on revenues of almost £6bn, in the financial year ending September 2018. As the largest of the UK operators (see Table 1), easyJet faces strong competition from other 'budget' airlines (Flybe and Jet2), package holiday firms (TUI and Thomas Cook) and the previous market leader, British Airways. The recent growth of easyJet in the UK has been helped by the closure of Monarch in December 2017 and continued labour disputes at British Airways.

	2015	2016	2017
easyJet	58.6	63.3	68.3
British Airways	41.3	42.1	42.8
TUI	10.6	10.9	11.3
Jet2	5.9	6.7	9.7
Flybe	7.8	8.4	9.2
Thomas Cook	6.4	6.6	7.3
Monarch	5.7	5.4	3.4

Source: CAA

Table 1 – UK Passenger numbers (million)

Across the whole of Europe, easyJet flew a record 88.5 million passengers, up 10% on the previous year, and filled 93% of its seats – meaning only 13 seats are empty on an average flight. Over the year, this 'load factor' (the percentage of seats sold across all flights) has increased by 9.8%. Typically, airlines have been satisfied with a load factor of around 75%.

Revenue per seat for easyJet in 2018 was £62, leading to a profit of £6.53 on each seat. But the airline had an additional £65m cost from "a change in approach to IT development" and a £40m cost from taking over the landing slots of the failed Air Berlin, at Tegel airport in Germany.

A growing amount of easyJet's revenue comes from what it calls 'ancillary' sources. When a customer buys a ticket online, they are also able to book hotel accommodation, car hire and airport transfers. The business aims to grow its holiday sales, offer an improved customer loyalty programme and target the business-travel market, with "a more personalised product including new business fares".

Although it is now common throughout the airline industry, easyJet was one of the first airlines to introduce a 'dynamic pricing model' which sees the price of a ticket increase as the date of the flight moves nearer. Table 2 shows how the prices quoted on two separate routes were lower if booked on the 18 December 2018 compared to the 18 March 2019. As the weeks go by, the price quoted will increase as the date of travel moves nearer. There are always exceptions to the rule, due to other supply and demand factors, but, in general, the sooner a customer books the better price they get.

3

Route	Date when price was quoted	Date of travel		
		6 April 2019	1 June 2019	5 October 2019
London Gatwick to Gran Canaria	18 December 2018	£194	£74	£60
	18 March 2019	£259	£80	£76
London Luton to Barcelona	18 December 2018	£110	£42	£39
	18 March 2019	£122	£46	£42

Source: *www.easyjet.com* (accessed 18/12/18 & 18/03/19)

Table 2 – Ticket prices quoted on different dates (seat only)

On most routes, customers have a choice of airline, and in each case the service is largely identical. It is now common practice on these short and medium-haul routes that food, seat reservations and luggage are not included in the basic ticket price (see Table 3).

Airline	Basic price including all taxes	Seat reservation	One piece of check-in luggage
British Airways	£143	Included with luggage	£20
easyJet	£74	£6 to £18.50	£42
Thomas Cook	£73	£10	£48
TUI	£311	£11	£25

Source: *Company websites* (accessed 18/12/18)

Table 3 – Ticket prices quoted for London Gatwick to Gran Canaria (to travel on 1 June 2019)

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- 1 (a) Refer to **line 11**. Calculate, using information from the stimulus material, the average cost of a seat on an easyJet plane in 2018.

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 [2]

- (c) Using **Table 2**, explain the concept of utility.

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- (d) “There is certainly a strong case for the current tax-free status of jet fuel to end.” (lines 36–37)

Explain, using a diagram, the impact on the level of consumer surplus if jet fuel is taxed by the UK government.

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- (e) Evaluate **two** factors which may determine the value of the price elasticity of demand for air travel. [8]

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33 Evaluate, using an appropriate diagram(s), whether unhealthy food is a demerit good.

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12-MARK QUESTIONS

2 questions in this booklet

2

SECTION A

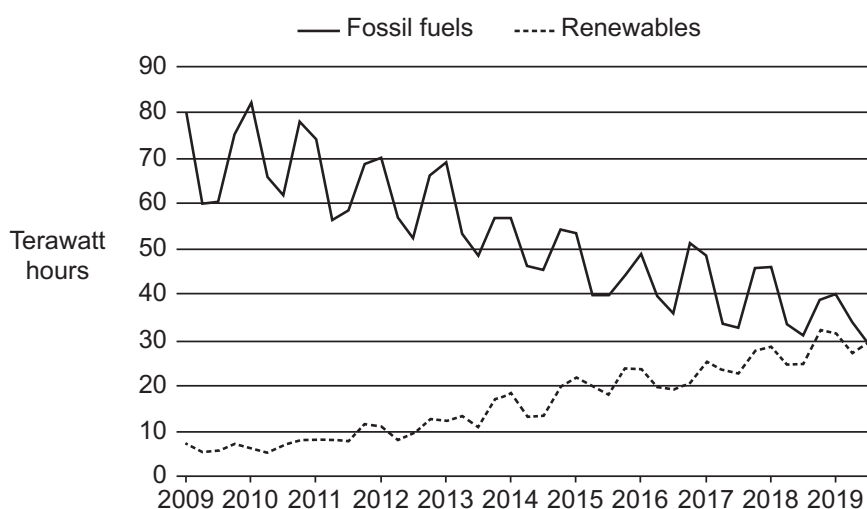
Read the following stimulus material and answer **all** parts of Question 1 which follow in this section.

Changing consumer trends in the UK?

Renewable energy sources, including wind, solar power and biomass, now provide more electricity to UK homes and businesses than fossil fuels, such as coal and gas. This was first achieved in the third quarter of 2019, see Fig. 1.

Fig. 1

UK electricity generation per quarter (measured in Terawatt hours)



Source: CarbonBrief

- 5 Coal is now used for less than 1% of electricity generation in the UK, with only four coal-powered plants remaining, ahead of a ban in 2025. Gas is the largest fossil fuel (38%) in the UK energy system. In terms of renewable energy sources, wind power is the UK's largest, making up 20% of the UK's electricity, followed by 12% from biomass and 6% from solar power. Nuclear power provides the remainder of the UK's electricity.

- 10 Kwasi Kwarteng, the government minister for energy and clean growth, said the renewables record is, "...yet another milestone on our path towards ending our contribution to climate change altogether by 2050. We've cut emissions by 40% while growing the economy by two thirds since 1990. Now, with more offshore wind projects on the way at record low prices we plan to go even further and faster in the years to come."

- 15 One of the largest firms in the UK is Shell, a multinational company. It provides 10% of the UK's oil and gas, employs about 6,000 people and serves over 5 million customers every week at more than 1,000 fuel service stations. It has the third largest number of fuel service stations, behind Tesco and BP.

- 20 However, Shell now faces the prospect of no more petrol cars, lorries running on liquid gas, and solar or wind powered homes and businesses. Even the fuel service station is changing, with most now seen as a retail outlet where people can do their food shopping, pick up a parcel or drink a coffee. Managers at Shell have taken all of these changes very seriously, as they attempt to reinvent the company which is also faced with new climate change targets. Some experts have compared the changes to a new industrial revolution.

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3

25 Shell's managers have already taken some big decisions. Shell has bought a company which makes electric vehicle (EV) charging points for homes and workplaces. It has also bought a supplier of electricity and gas in the UK. Shell's managers see a time when the business will supply all of an individual's energy needs.

30 Shell is trying to take the lead in EV charging points for battery-powered cars. At present, less than 2% of cars on UK roads are battery-powered. However, by 2040 a third of all vehicles could be electric. Shell believes it is well placed to take advantage of this growing market, as it has already launched a 'rapid recharge service' which uses 100% renewable energy. It announced the opening of its 50th EV charging station in October 2019. Given its large number of fuel service stations and its strong position in the market, Shell plans to install hundreds more charging stations around the UK.

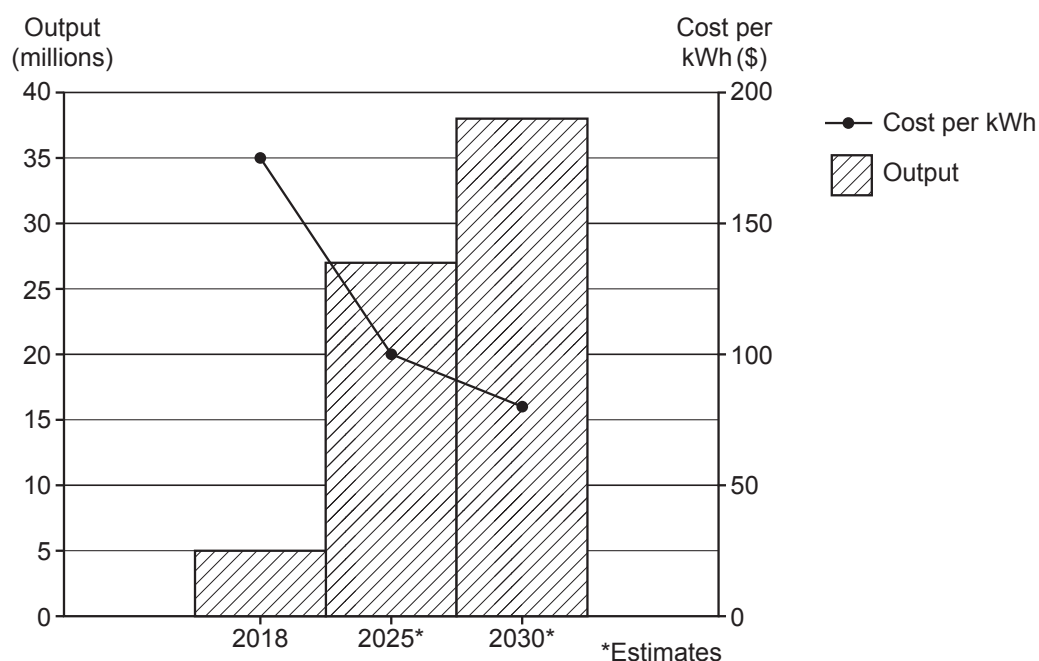
35 The growth in EV charging stations will be necessary if the UK government's 'Road to Zero' strategy, to ban the sale of new petrol cars by 2030, is to be successful. As part of this strategy, more taxes may be imposed to change the marginal private cost of using petrol cars, so that the price paid is closer to the marginal social cost inflicted on society. Once the price of battery-powered cars falls to a level closer to that of petrol cars, the use of a subsidy may also be beneficial.

40 One of the largest costs of running a petrol car is the petrol. The demand for petrol appears to be significantly price inelastic. A 2019 review of over 100 pieces of research about the price elasticity of demand for petrol found it to have a value of -0.26 in the short run and -0.58 in the long run.

45 Another limit on the growth of battery-powered cars is the cost of producing the batteries. Many experts say that a battery-powered car cannot be price competitive until the cost of a battery falls below \$100 per kilowatt hour (kWh), see Fig. 2.

Fig. 2

Global car battery production



Source: Daily Telegraph

Some experts argue that the structure of this market will affect progress as, along with the energy and power generation markets, it is really a natural monopoly.

7

- (e)* Evaluate, using evidence from the stimulus material, the factors which may influence the choice of objectives for a firm such as Shell. [12]

This image shows a full page of a handwriting practice worksheet. It consists of approximately 20 horizontal rows. Each row is defined by two parallel dotted lines, creating a series of uniform gaps for letter height. The entire page is otherwise blank, with no margins, text, or other markings.

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SECTION A

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

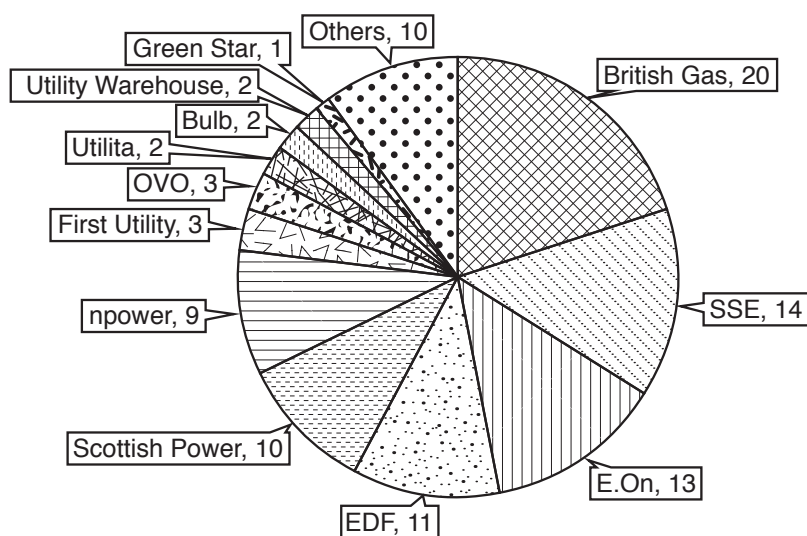
A bright future in Uganda

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Fig. 1 – UK energy suppliers' market share, 2018 (%)



Source: OFGEM

3

- 25 Uganda is at the centre of the solar energy revolution in Africa. For development organisations, including the United Nations, and socially minded investors, the opportunities are exciting. Street lights, topped with solar panels, charge up through the bright daylight hours and illuminate the streets each night. For a growing number of energy companies, the huge number of people without reliable power represents the opportunity to access a growing market.
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7

(e)* The concept of rationality helps economists to understand the behaviour of economic agents.

Evaluate, using evidence from the stimulus material, how rationality may help us to understand the behaviour of firms. **[12]**

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15-MARK QUESTIONS

4 questions in this booklet

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- 36** Evaluate, using the information in Extract 3, the extent to which the Paris Accord and tradable pollution permit schemes will be effective in solving environmental market failure. **[15]**

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26

- 37** Using the data in **Fig. 3.1** and the information in **Extract 3**, calculate the value of UK financial services exports in 2018.

[2]

- 38*** Evaluate, using the information in **Extract 3**, the extent to which deregulation of financial services would benefit the UK economy. **[15]**

[illegible]

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21

34* Evaluate, using the information in **Extract 2**, whether economic agents benefit from the food industry becoming more contestable. [15]

[illegible]

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24

37* Evaluate, using the information in **Extract 3**, the extent to which emerging economies gain more from international trade than developed economies. [15]

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25-MARK QUESTIONS

10 questions in this booklet

SECTION B

2* In 2020, the Competition and Markets Authority (CMA) found that three pharmaceutical companies had taken part in an illegal agreement resulting in the price of a life-saving medicine supplied to the NHS increasing by up to 1800%. This was one of many examples investigated by the CMA where consumers were being disadvantaged by collusion and the actions of monopolies.

[25]

3* A report for the charity Action on Smoking and Health (ASH) in January 2022 estimated that smoking in England imposed costs on the NHS totalling £2.4 billion and costs on businesses, from lost productivity, of £17.2 billion.

[25]

[illegible]

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SECTION C

4* Flood defences are considered by economists to be public goods. The £67.4 million Ipswich tidal flood barrier is just one of the many flood defence schemes which has been completed during the government's current capital investment programme. The scheme protects 1600 homes and 400 businesses from tidal flooding.

[25]

5* Aldi, a discount supermarket, entered the UK market for the first time in 1990. Since then it has expanded its operation and, in 2022, its market share was 9.3% making it the fourth largest supermarket in the UK.

[25]

[illegible]

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SECTION B

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

EITHER

- 2*** Price ceilings have been used in a number of different markets, ranging from rented housing in New York to food in Venezuela and the cap on energy bills in the UK.

Evaluate, using an appropriate diagram(s), the impact a price ceiling may have on the level of consumer and producer surplus in a market. [25]

OR

- 3*** Netflix is the world's largest online video subscription service. By 2018, after only 10 years in existence, it had 137 million worldwide subscribers. 65% of online video viewers in the USA watch Netflix at least once a month.

Evaluate, using an appropriate diagram(s), the advantages and disadvantages of a perfectly contestable market. [25]

Question no.

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SECTION C

EITHER

- Evaluate the extent to which specialisation and the division of labour might help in addressing the basic economic problem. **[25]**

Question no.

[illegible]

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13
SECTION C

Answer EITHER Question 4 OR Question 5.

EITHER

- 4* “A £1.4bn government bailout has been announced for Crossrail, as Europe’s biggest infrastructure project to build a new underground line across London is once again over budget and delayed. This is yet another example of a failed government-financed and managed project.”

Evaluate whether governments should finance large infrastructure projects such as Crossrail. [25]

OR

- 5* Supporters of a centrally planned economic system believe a central government can achieve social and national objectives more efficiently than a market economy. For example, they highlight the increase in income inequality in China since it has introduced market-based reforms.

Evaluate whether it is possible to allocate resources efficiently in a centrally planned economic system. [25]

Question

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Question

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Section B

2* There are more than 10 million dogs in the UK, with 34% of UK households owning a dog. In 2023, demand for the services of dog walkers increased in the UK. Dog walkers operate in a monopolistically competitive market, similar to that for hairdressing and painting and decorating.

[25]

3* In March 2020 the Welsh Government introduced a minimum price for alcohol of £0.50 per unit. According to the minimum pricing formula in Wales, a 70 cl bottle of vodka priced at £9.75 in England would have to be sold at a minimum price of £13.12 in Wales.

[25]

[illegible]

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Section C

4* In May 2023, NHS waiting lists for routine hospital treatment rose to 7.42 m, the highest figure since records began in 2007.

OR

5* In recent years, labour mobility has not changed significantly in the UK. Governments seek to increase the mobility of labour using a range of policies.

Evaluate the impact an increase in labour mobility is likely to have on labour markets. **[25]**

Question No.

[illegible]

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SECTION C

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

EITHER

- 4* The total police budget in the UK for 2018/19 was £12.3bn, most of which was funded from taxation. This is an amount of money equivalent to £186 per person.

Evaluate the effectiveness of state provision of public goods.

[25]

OR

- 5*** NHS figures show that a declining number of children are receiving all their routine vaccinations, including meningitis and the combined measles, mumps and rubella (MMR) vaccine. In some cases, vaccination rates of children are as low as 90%.

Evaluate the significance of information failure in decisions made about the consumption of merit goods. [25]

Question no.

This image shows a full page of a handwriting practice worksheet. It consists of multiple rows of horizontal dashed lines spaced evenly down the page, providing a guide for letter height and placement. The background is plain white, and there are no margins or additional markings.

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MARK SCHEMES

official OCR mark schemes

15	B	A B Order to avoid being outcompeted. A maximum price imposed above the market equilibrium would not change the price in the market Correct: A minimum price at P_3 would prevent firms selling below this price, regardless of whether there was excess supply	AO1	/
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18	C	A % change in income / % change in quantity demanded B Reverses new and old quantity demand and income: $(52,000 - 46,000 / 46,000 \times 100) / (20,000 - 24,000 / 20,000 \times 100)$ C Correct: % change in QD / % change in income = $(46,000 - 52,000 / 52,000 \times 100) / (24,000 - 20,000 / 20,000 \times 100) = -0.58$ D Reverses new and old quantity demanded: $(52,000 - 46,000 / 46,000 \times 100) / (24,000 - 20,000 / 20,000 \times 100) = 1.73$	AO2	/
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25	C	A	This is a monopoly case in which firms are making supernormal profit. Barriers to entry will mean firms are unable to enter the market to compete.	AO3	/
		B	This is an oligopoly case in which firms are making a supernormal profit. Barriers to entry will mean firms are unable to enter the market to compete.		
		C	Correct – this is a monopolistic competition case where a loss is being made, which would cause firms to leave the market and the industry supply curve to shift to the left.		

26	B	A This is the marginal utility of consuming the fifth lettuce	AO2	/
		B Correct – Total Utility of consuming the fourth lettuce – Total Utility of consuming the third lettuce = 28 – 23 = 5		
		C This is the marginal utility of consuming the third lettuce		
		D This is the average utility of consuming four lettuces		

29	A	A Correct – quantity demanded becomes more responsive to a change in price as there as a contraction along the demand curve B Demand becomes more price inelastic as there is an extension along the demand curve (ie. as the price falls) C Price elasticity of demand varies along a straight line demand curve D Unit elastic demand refers to a unique point on the demand curve where quantity demanded responds directly proportionally to a change in price	AO1	
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8	B	A This is the change in consumer surplus: $(5 \times 10 / 2) - (7 \times 16 / 2) = -£31$ B Correct: $(3 \times 10 / 2) - (5 \times 16 / 2) = -£25$ C This is the change in producer surplus from moving from point B to point A D This is the change in consumer surplus from moving from point B to point A	AO3	/
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1	A	A	Correct: A decrease in price causes an extension along the demand curve as consumers demand more of a good when it is cheaper to purchase.	AO1	
		B	A decrease in price would cause a contraction along the supply curve as it is less profitable to produce the good.		
		C	The demand curve shifts as a result of changes in non-price factors.		
		D	The demand curve shifts as a result of changes in non-price factors.		

14	B	A	A good cannot have cross elastic or cross inelastic demand – cross elasticity of demand is about the relationship between two goods.	AO2	✓
		B	Correct: The extent of the shift of the demand curve could show how demand has responded to a change in income, which explains the income elasticity of demand. Here an increase in income has caused a bigger increase in the demand for Good X than Good Y, meaning demand for Good X is more income elastic than the demand for good Y.		
		C	Price elasticity of demand is illustrated by the gradient of the demand curve, not the extent to		

17	D	A	Cross elasticity of demand concerns the behavior of consumers; stock impacts producers rather than consumers.	AO1	
		B	Income elasticity of demand concerns the behavior of consumers; stock impacts producers rather than consumers.		
		C	Price elasticity of demand concerns the behavior of consumers; stock impacts producers rather than consumers.		
		D	Correct: The more stock that is available the more elastic supply will be, as the easier it is for firms to respond to a change in price by releasing stock or reducing supply to the market by increasing stock levels.		

21	C	A	Students are economically inactive so are not classed as being unemployed.	AO3	
		B	The individual is economically inactive so is not unemployed, as they are not actively seeking work.		
		C	Correct: An individual is described as being economically active if they are employed or unemployed, so it is possible an individual is economically inactive but currently unemployed, providing they are seeking work.		

24	A	A Correct: This is likely to be a situation of asymmetric information, where the seller had more information than the buyer about the condition of the car, leading the buyer to overestimate its value and pay more than the utility they ended up enjoying. B This explains that an individual is likely to take more risk when they are insured. C There may be some negative externalities of consumption associated with car use, but this does not impact the price a consumer is willing to pay or the utility they derive from consuming the good. D There is likely to have been an opportunity cost associated with choosing to consume the car, but this does not explain why they effectively over-paid.	AO1	
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29	D	A	Allocative inefficiency will occur but this is not represented by area XYZ.	AO1	✓
		B	Consumer surplus is the difference between what consumers are willing to pay and what they actually pay and would be illustrated by the area below the demand/MPB curve and above the price line.		
		C	There will be a deadweight loss but this is not represented by area XYZ.		
		D	Correct: Producer surplus is the difference between the price producers receive and the price they are willing to accept – the area above the supply curve/MPC curve and below the price line.		

7	C	A	This occurs when there are third party benefits ignored by consumers when consuming a good or service.	AO1	
		B	This occurs when there are third party benefits ignored by producers when producing a good or service.		
		C	Correct: The scarcity of resources means choices have to be made over how to allocate them.		
		D	This occurs in the public good case when consumers are not willing to pay for a good or service because they will wait for someone else to consume it and then consume the good for free, because of its non-excludable nature.		

9	B	A	This is a good that has no opportunity cost associated with its consumption or production.	AO1	
		B	Correct: It is possible to stop someone from consuming the good if they have not paid for it and one person's consumption affects the ability of someone else to consume the good.		
		C	A public good is non-rival and non-excludable.		
		D	A quasi-public good is either rival or excludable, but not both.		

11	B	A	This is a cause of market failure.	AO1	
		B	Correct: Governments are often looking for quick-fixes with immediate results to please the electorate, meaning they sometimes do not take decisions that produce the best long term outcomes.		
		C	This is a cause of market failure in the public good case.		
		D	This explains the conflict between ownership and control when determining the behaviour of firms.		

13	C	A	An increase in the marginal revenue product of labour will lead to employment increasing.	AO3	
		B	Each worker now contributes more to a firm's revenue, meaning the wage rate increases.		
		C	Correct: An increase in the marginal physical product of labour will increase the marginal revenue product of labour. This shifts the demand curve for labour to the right, leading to employment and the wage rate to increase.		
		D	An increase in the marginal revenue product of labour will lead to employment increasing.		

14	B	A	There is a contraction along the demand curve in response to an increase in price.	AO2	
		B	Correct: A decrease in the price causes an extension along the demand curve, as more individuals are willing and able to purchase the phone at a lower price.		
		C	The demand curve shifts in response to a change in a non-price factor. In this instance the price of the smartphone has changed.		
		D	The demand curve shifts in response to a change in a non-price factor. In this instance the price of the smartphone has changed.		

15	C	A This is the average tax rate. B This is the marginal tax rate charged on the first portion of the pay rise. C Correct: Marginal tax rate = Change in tax paid / Change in income x 100. Change in tax paid = $((66,000 - 55,977) \times 0.275) + ((55,977 - 51,000) \times 0.225) = 2,756.33 + 1,119.83 = 3,876.16$. Change in income = 15,000. Marginal tax rate = $3,876.16 / 15,000 \times 100 = 25.8\%$. D This is the marginal tax rate charged on the second portion of the pay rise.	AO2	✓
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22	B	A	This is where information is not shared equally between the two parties involved in the market transaction.	AO2	
		B	Correct: Moral hazard explains how individuals are likely to take more risk when they are insured, because they have absolved themselves from paying for the consequences.		
		C	This is where third parties are harmed as a result of the good or service being consumed.		
		D	This is where third parties are harmed as a result of the good or service being produced.		

23	B	A	This occurs in an oligopoly.	AO1	
		B	Correct: In an economy without money to act as a medium of exchange, goods and services are purchased by swapping them for another good or service.		
		C	This explains a buffer stock scheme.		
		D	This is division of labour.		

28	B	A	This would cause the demand curve to shift.	AO2	✓
		B	Correct: This would reduce a firm's costs of production, increasing profitability and shifting the supply curve to the right.		
		C	This would increase a firm's costs of production, decreasing profitability and shifting the supply curve to the left.		
		D	This would cause the demand curve to shift as it would increase real disposable income.		

4	C	A	Incorrectly specifies the formula as % change in income / % change in QD.	AO2	✓
		B	Ignores the YED figure and decreases demand by 3%.		
		C	Correct: $0.4 = \% \text{ change in QD} / -3\%$. $\% \text{ change in QD} = -1.2\%$. New quantity demanded = $0.988 \times 650 = 642$.		
		D	Incorrectly specifies income to have increased by 3%.		

18	B	A This is the original producer surplus. B Correct: The old producer surplus is P, V, Z and the new producer surplus is P1, W, Z so area P, P1, W, V represents the increase in the size of the producer surplus. C This is the new consumer surplus. D This is the new producer surplus.	AO2	✓
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2. ~~where they show relevance.~~
- Using 'best fit', decide first which set of BAND DESCRIPTORS best describes the overall quality of the answer. Once the band is located, adjust the mark concentrating on features of the answer which make it stronger or weaker following the guidelines for refinement.
- Highest mark: If clear evidence of all the qualities in the band descriptors is shown, the HIGHEST Mark should be awarded.
 - Lowest mark: If the answer shows the candidate to be borderline (i.e. they have achieved all the qualities of the bands below and show limited evidence of meeting the criteria of the band in question) the LOWEST mark should be awarded.
 - Middle mark: This mark should be used for candidates who are secure in the band. They are not 'borderline', but they have only achieved some of the qualities in the band descriptors.

20	B	A B C D	This describes adverse selection as a result of asymmetric information. Correct: moral hazard is the situation where people change their behaviour if they are protected against any potential losses. This is the definition of merit goods. This is the definition of the free rider problem associated with public goods.	AO1	
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25	B	A B C D	money in the account for a specified time period or give a period of notice to withdraw money. A fall in the price will lead to an increase in consumer surplus. Correct: A maximum price will move the market into disequilibrium. At a price lower than the equilibrium price there will be more demand than supply. The government budget will not be directly impacted. A fall in the price will lead to a fall in the producer surplus for landlords.	AO3	
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5	C	The goods are not strong complements as the increase in the demand for Good B (3%) is smaller than the fall in price of Good A (12%) The XED is lower than 1. The goods are not substitutes because a fall in the price of Good A leads to an increase in the demand of Good B. If the goods were substitutes a fall in price of Good A would lead to a decrease in the demand for Good B. Correct: XED = $3 / -12 = -0.25$. The goods are complements as a fall in the price of one good has led to an increase in the demand for the other good. The relationship is weak as the increase in demand is proportionally smaller than the decrease in price. The goods are not substitutes because a fall in the price of Good A leads to an increase in the demand of Good B. If the goods were substitutes a fall in price of Good A would lead to a decrease in the demand for Good B.	AO2	✓
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9	A	A B C D	Correct: The marginal utility of consuming the 4th unit (4) is lower than the marginal utility of consuming the third unit (6). This is the first unit of output where marginal utility has fallen. This is not the first unit of output at which marginal utility has fallen. This is not the first unit of output at which marginal utility has fallen. Total utility has fallen because of consuming the 7th unit of output.	AO2	✓
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26	D	A This is where individuals consume too much of a good because they overestimate the benefits of consuming the good – in this scenario, there is underconsumption because women are not fully aware of the benefits. B This is where there are third party harms associated with the consumption of the good – there is no evidence of that here. C This is where individuals do not consume the good because they do not care about third party benefits – the scenario set up here clearly implies women do not consume folic acid because they are unaware of the beneficial impacts to their baby of doing so. D Correct: There is information failure meaning women are not fully aware of the benefits of consuming folic acid, leading to underconsumption. The information provision is designed to increase awareness and in doing so increase consumption.	AO2	
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28	B	A	This describes substitutes – where two goods are in competition with each other.	AO2	
		B	Correct: Composite demand is where one good is demanded for multiple uses. This is the case with wood.		
		C	This describes complements – where two goods are demanded together.		
		D	This is the aggregation of individual demand.		

3	B	A	Incorrect formula: $XED = \% \text{ change in price of good X} / \% \text{ change in quantity demanded of good y}$. $1.7 = \% \text{ change in price of good X} / 4.5\%$. $\% \text{ change in price of good X} = 1.7 \times 4.5 = 7.65\%$. $P_1 = £2.50 / 1.0765 = £2.32$.	AO2	✓
		B	Correct: $1.7 = 4.5 / \% \text{ change in price of good X}$. $\% \text{ change in price} = 4.5/1.7 = 2.647\%$. $P_1 \times 1.02647 = £2.50$. $P_1 = £2.50 / 1.02647 = £2.44$.		
		C	Incorrectly calculates $\% \text{ change in price of good X}$ to be $1.7/4.5 = 0.378\%$. $P_1 = £2.50 / 1.00378 = £2.49$.		
		D	Incorrectly specifies £2.50 as the original price so calculates the new price as $£2.50 \times 1.02647 = £2.57$.		

5	B	A	The price will increase as a result of the quota being imposed as US consumers no longer have access to plentiful supply of cheap imports.	AO3	✓
		B	Correct: The new supply curve is S_{Total} , giving a market equilibrium price of P_2 . Consumption will therefore be at Q_5 , with Q_2 being domestic production as this is the amount domestic producers are willing to supply at a price of P_2 .		
		C	This incorrectly assumes that there will be no imports – a quota still allows for some imports.		
		D	This would be the market price if there was an embargo on imports.		

7	C	A This is where an individual cannot be stopped from consuming a good, even if they haven't paid for it.	AO1	
		B This is where an individual cannot opt out of consuming a good.		
		C Correct: The individual in London is not competing for the use of the good with an individual in Sunderland – consumption is non-rivalrous.		
		D This is not a feature of a public good.		

12	D	A	Social cost includes private cost and external cost	AO1	
		B	Social cost includes private cost and external cost		

18	B	A	Microfinance is primary targeted at developing nations with an underdeveloped financial sector.	AO1	
		B	Correct: individuals or groups of individuals access small scale loans to stimulate entrepreneurship.		
		C	Microfinance is targeted at individuals or small businesses, not large firms.		
		D	Microfinance is targeted at individuals or small businesses, not large firms.		

19	B	A	This concept is associated with the product market rather than the labour market.	AO1	✓
		B	Correct: This is the surplus workers earn above the lowest wage they would be willing to supply		

20	A	A Correct: Initial profit = $(£29.17 \times 30,000) - £675,000 = £200,100$. New profit = $(£35 / 1.05 \times 30,000) - £675,000 = £325,000$. Profit increases by £124,900. B This is the initial profit made. C This is the new profit that is made. D Profit increases because the firm pays less VAT than it did before.	AO2	✓
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22	B	A	A direct tax is a tax on income or profit.	AO1	
		B	Correct: an indirect tax is a tax imposed on goods or services – in this case the tax is imposed on fuel.		
		C	Progressive taxes take a higher proportion of income from those on high income than those on low income. Indirect taxes generally take a higher proportion of income from those on low income so are regressive.		
		D	Proportional taxes take the same proportion of income from all income groups. Given this tax is		

23	A	A	Correct: Consumer surplus is the area below the demand curve and above the price line.	AO3	✓
		B	This was the consumer surplus when the market equilibrium was at point X.		
		C	This is producer surplus.		
		D	This is the area of the original consumer surplus that is lost when the price increases.		

24	B	A	This is an assumption often used in economics – that all other things remain equal.	AO2	
		B	Correct: there is excess demand caused by the price being too low.		
		C	This occurs when individuals are not willing to pay for a good because they believe they can free ride off someone else's consumption – this occurs in the public good case.		
		D	There is no evidence given here of any determinantal impact on third parties resulting from the consumption of the good.		

4	A	A	Correct: $((122 - 87) / 87 \times 100) / ((400 - 500) / 500 \times 100) = 40.23\% / -20\% = -2.01$	AO2	✓
		B	Calculates % change in price as $(500 - 400) / 400 \times 100$		
		C	Calculates PED as % change in price / % change in quantity demanded		
		D	Calculates % change in quantity demanded as $(87 - 112) / 87 \times 100$		

6	C	A This is likely to solve market failure caused by a firm exploiting its market power.	AO1	
		B Regulation will increase costs of production, which is likely to reduce rather than increase production.		
		C Correct: A subsidy will reduce costs of production, making it more profitable to produce the good, resulting in production increasing.		
		D Taxation will increase costs of production, which is likely to reduce rather than increase production.		

9	C	A	Demand will increase rather than decrease when the price of a substitute increases.	AO3	✓
		B	This will be the impact on the market for flights, not the market for campsites.		
		C	Correct: As the price of foreign holidays increases, consumers will switch away to domestic holidays as they are relatively cheaper, causing the demand curve to shift to the right.		
		D	This is an extension rather than a shift in demand – because the increase in demand has resulted from a change in a non-price factor, there is a shift rather than a movement.		

1	b	A marginal income tax rate is one example of the marginal principle used by economists. Explain what is meant by the economic concept of ‘the margin’. The concept of the margin relates to the impact of one more unit / an extra unit (1). Examples include: • marginal cost – the impact on total costs of an extra unit of production (1) • marginal benefit / utility – the impact on benefit / utility / satisfaction of an extra unit of consumption (1) • marginal income tax rate – the impact on tax paid of an extra £ of income earned (1)	2 (AO1 x 2)	Annotate with  1 mark for reference to extra / additional / one more unit 1 mark for reference to tax, cost, utility, revenue product
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31	Explain, using the information in Extract 1, why private car journeys may be overconsumed in the free market. 1 mark for knowledge: • there are negative externalities of consumption (1) • consumers ignore the harms to third parties from driving their cars (1) 1 mark for application: • other road users experiencing longer journeys because of congestion (1) • the wider population suffering from more pollution (1).	2 AO1 x 1 AO2 x 1	Credit can only be given for the example of a negative externality if it relates to the case study eg. congestion, pollution caused by traffic
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32	Explain, using the information in Fig. 1.2, what has happened to the price of train tickets between 2004 and 2020. <i>Award up to 2 marks for an explanation of what has happened to the price of train tickets:</i> 1 mark for: • ticket price has increased (1) 1 mark for: • comparing the price increase to inflation (1) • calculating how much a ticket prices have increased by.(1)	2 AO2 x 2	Prices have risen higher than Retail Price Index does not get the second mark without reference to inflation or real. Accept between 81-85% or risen by more than 80% 2 marks for statements such as prices have increased in real terms
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37	Using the data in Fig. 3.1, calculate the value of UK financial services exports in 2018. <i>Award 2 marks for the correct answer:</i> £62.5bn (2) <i>Award 1 mark for the correct working but incorrect answer:</i> $£297.4 / 100 \times 21$ (1)	2 AO2 x 2	Award 1 mark if £ and/or bn is missing but the numerical value is correct. As decimal places not asked for in the question, also accept £62.454bn or £62.45bn for 2 marks Alternatives of correct working can be credited eg $£294.7\text{bn} \times 0.21$
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1	a	Explain what is meant by the term 'subsidy'. A payment to producers (1) which will reduce their production costs (1) and increase / encourage more production / supply / shift supply curve to the right (1).	2 (AO1*2) Annotate with  1 mark for reference to it being a payment to a producer (accept grant) 1 mark for explanation in terms of production costs or production / supply
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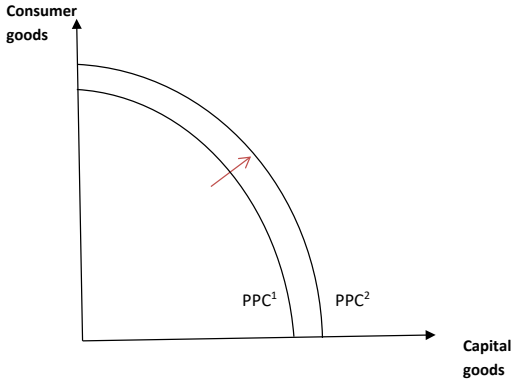
Question	Answer	Marks	Guidance
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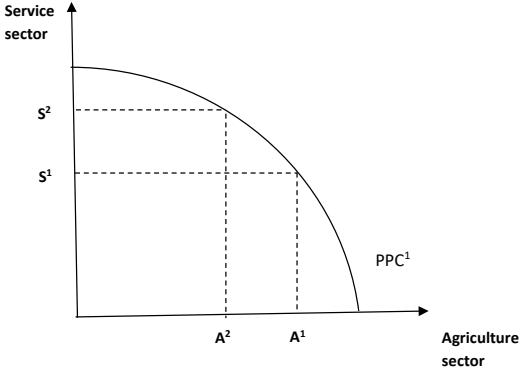
1	(a)	Explain what is meant by ‘competitive supply’. The ability to produce different / alternative products (1) using the factors of production / inputs / resources (1) so that to increase the supply of one good requires a reduction in the supply of the alternative (1).	2	Annotate with 
Question	Answer		Mark	Guidance

1	(c)(i)	Calculate the percentage change in average house prices between August 2020 and August 2021. Using Fig. 1: • $((138 - 125) / 125) \times 100$ (1) • $(13 / 125) \times 100$ (1) • 10.4% • Accept any answer in the range 10.3% to 11.3% Using the information in lines 1 – 2: • $((£280,825 - £239,000) / £239,000) \times 100$ (1) • $(£41,825 / £239,000) \times 100$ (1) • 17.5% (1)	2	Annotate with  Candidates can calculate the % change using either the information in Fig. 1 or in Lines 1 – 2 Award 2 marks for an answer of 17.5% or 10.4% (accept answers in the range 10.3% - 11.3%) with or without workings shown Award 1 mark for correct working but incorrect answer
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Question	Answer	Mark	Guidance
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1	(c)(ii)	Compare the trend in average house prices and rental prices between February 2015 and August 2021. • Both average house prices and rental prices have increased (1) • Average house prices increased at a faster rate than rental prices (1) • Rental prices increased by approximately 11% (1) • Average house prices increased by approximately 38% (1) • Average house prices have increased about three times more than rental prices (1) • Average house prices have been more volatile than rental prices (1)	2	Annotate with 
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1	a	i	Draw a PPC diagram to explain the following statements: (i) with dependable electricity, GDP growth across sub-Saharan Africa could be up to 2% higher per annum than current rates (lines 8-9); 	2 (AO1*1 AO2*1) Annotate with ✓ Up to 2 marks for a diagram which shows: • an accurate and fully labelled PPC diagram (1) • an outward shift of the PPC (1)
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	ii Draw a PPC diagram to explain the following statements: (ii) Uganda has seen a fall in the agriculture sector's contribution to GDP at the same time as growth in the service sector's contribution (lines 16-18). 	2 (AO1*1 AO2*1) Annotate with ✓ Up to 2 marks for a diagram which shows: - a PPC diagram which shows a movement along the PPC (or pivot/movement in favour of the service sector) (1) - labelling of higher output of agricultural sector <u>and</u> lower output of service sector (1) NB: The data from lines 16-18 may be used to show application for the second mark <i>To prevent candidates being penalised twice, marks can be awarded where the PPC is not fully labelled?</i>
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1	b	Explain what is meant by a 'barter economy'. An economy where goods/services are exchanged (1) without the use of money (1)	2 (A01*2)	Annotate with  2 marks for a correct answer 1 mark for a partially correct answer or for recognising an element of bartering, e.g.: • reference to exchange / trade of goods / services • reference to cashless economy • reference to goods / services exchanged for other goods/services • requires the 'double coincidence of wants'
Question		Answer	Marks	Guidance

1	d	i	Refer to line 11-13. Calculate the income elasticity of demand for the service sector in Uganda over the last two years. Percentage change in income (line 11) = 26% Percentage change in demand (line 13) = 15% YED = $15/26$ (1) YED = 0.58 (1)	2 (A02*2)	Annotate with  2 marks for a correct answer (with or without working) [Accept 0.577 or 0.6] 1 mark for clear evidence of using correct numbers (15 & 26) in the correct formula 1 mark for a 'correct' numerical answer of the wrong magnitude or with units
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1	b	Refer to lines 14-18. Explain, using evidence from the stimulus material, what is meant by joint demand. Demand for goods is interdependent (1) as someone buying a flight ticket may also purchase hotel accommodation (1).	2 (AO1*1) (AO2*1) Annotate with  1 mark for a correct definition of joint demand: • Demand is interdependent • Goods are demanded together • Reference to complementary goods 1 mark for a correct use of a <u>contextual example</u> by combining any two of the following: • flights • holiday/hotel accommodation • car hire • (airport) transfers • seat reservation • (check-in) luggage • food on the plane
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1	c	Using Table 2, explain the concept of utility. Utility is the benefit derived from consumption (1) which is lower for a flight ticket to be purchased further in advance (1)	2 (AO1*1) (AO2*1)	Annotate with  1 mark for correct statement about what utility measures 1 mark for correct use of data from Table 2 • there are more people wanting to fly in April than in June / October therefore total utility is higher • there are fewer people wanting to fly in October than in April / June / therefore total utility is lower
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31		Using the data in Fig 1.1, explain what happened to public sector wages after 2010. <i>Award 1 mark for an explanation of what happened to real or nominal wages:</i> - Public sector wages increased in nominal terms (1) - Real wages fell (1) <i>Award 1 mark for appropriate use of the data:</i> - Public sector wages increased by 17.2% in nominal terms (1) - Nominal wages increased by less than the increase in price level of 20.6% (1)	2 AO2 x 1 AO3 x 1	A simple statement that public sector wages increased or decreased without reference to nominal or real should not be credited. Award 1 mark for correctly calculating that public sector wages have increased by 17.2%, even if the reference to this being a nominal increase is missing. Do not credit the CPI increased at a faster rate of 20.6%, unless there is some reference to this being the price level or the rate of inflation.
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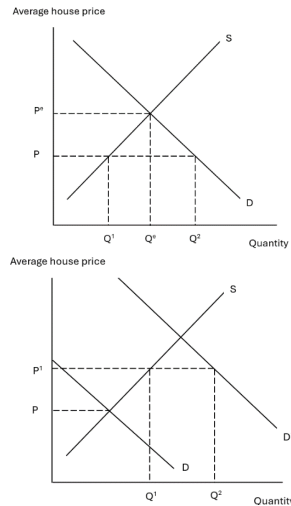
35	Explain why infrastructure such as high speed rail is unlikely to be provided in a market economy without government intervention. Award up to 2 marks for knowledge of valid reasons and / or knowledge of a relevant example Award 1 mark for a linked explanation - there are positive externalities of provision (1) - example – improved geographical mobility of labour (1) - linked explanation – infrastructure would be underprovided in a market economy because the external benefits would not be considered (1) - private costs of infrastructure provision are high (1) - examples – acquisition of land / construction costs (1) - linked explanation - private costs occur over a long period of time (1) - private costs occur before infrastructure delivers private benefits / revenue (1) - private costs are subject to uncertainty and are likely to be larger than expected (1) - private sector may not be able to raise finance or be willing to bear risk of provision (1)	3 AO1 x 2 AO3 x 1 Annotate with  Only award marks for infrastructure being a public good if it is relates to a relevant example of infrastructure - some infrastructure might be public goods (1) - example – flood defences (1) - linked explanation - public goods are non-excludable and non-rivalrous / subject to the free-rider problem (1) - private sector would not provide such infrastructure because they would not be able to charge for its use (1)
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1	b	“...more taxes may be imposed on the marginal private cost of using petrol driven cars, so that the price paid is closer to the marginal social costs inflicted on society.” Lines 36-38 Explain, using an appropriate diagram, how this could be achieved. Price P^* P^1 P Quantity MSC S^1 (MPC + additional tax) S (MPC + current) Demand A B	4 (AO1*2) (AO2*2) Annotate with ✓ Up to 2 marks for a diagram which shows: - original demand and supply (1) $MSC > S$ (MPC + current tax) (1) If a Candidate uses a negative consumption externality award diagram marks as follows - original demand and supply (1) $MSB < D$ (MPB) (1) Up to 2 marks for explaining how this is achieved: - Size of tax required = AB – in words or on diagram (1) - Tax increases production costs (1) - Leftward shift of S (MPC) towards MSC (1) - Increase in price from P towards the socially optimum of P^* (1)
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1

(b)

Explain, using an appropriate diagram, the situation in the housing market described in lines 1-3.



4

Lines 1 – 3:

Between August 2020 and August 2021, average house prices in the UK rose from £239000 to £280825. 2021 was a record year for house sales in the UK. Very high demand continued, with many in the market saying that there is considerable shortage in supply.

Annotate with

Up to 2 marks for a diagram which shows:

- correctly labelled demand and supply diagram (1)
- rightward shift in demand (1)
- excess demand / shortage ($Q^1 - Q^2$) below the equilibrium price (1)

NB the disequilibrium may be shown before or after a shift in demand

Up to 2 marks for explaining that:

- current price likely to be below market equilibrium price (1)
- there is a shortage / quantity demanded > quantity supplied (1) which putting upward pressure on prices (1)

1	d	Explain, using a diagram, the impact on the level of consumer surplus if jet fuel is taxed by the UK government.	4 (AO1*2) (AO2*2) Annotate with ✓ Candidates can draw a demand and supply diagram with a leftward shift in supply OR a demand diagram with a higher price. Up to 2 marks for a diagram which shows: • correctly labelled diagram (axes and curves) (1) • shift in supply schedule to the left (1) OR higher price (1) Up to 2 marks for explaining the impact on consumer surplus: • Consumer surplus falls (1) • Consumer surplus falls from ABC to ADE (1) • Consumer surplus falls by DECB (2) Consumer surplus may be represented by labelled or shaded areas
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36	Explain, using the information in Extract 2, the impact on the UK economy of introducing export subsidies to the automotive industry in the UK. Level 2 (5–8 marks) Good knowledge, understanding and application of export subsidies. Good – strong explanation of the impact of introducing export subsidies to the automotive industry in the UK. Good explanation will be in the form of developed links. These links are developed through a chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct and linked to the analysis. Strong explanation will have consistently well-developed links through a coherent chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the explanation. Any diagrams must be integral to the explanation. Level 1 (1–4 marks) Limited – reasonable knowledge, understanding and application of export subsidies. Limited – reasonable explanation of the impact of introducing export subsidies to the automotive industry in the UK. Limited explanation will have little evidence of reasoning that addresses the question asked. There is a lack of a clear structure. Reasonable explanation will have correct explanation largely in the form of single links. These address the question but are not developed into a clear chain of reasoning. Any relevant diagram(s) may be imperfectly labelled or not linked to the analysis.	8 AO1 x 2 AO2 x 2 AO3 x 4	Knowledge, Understanding and Application: Knowledge, Understanding and Application marks should be awarded for material that is given in the case study: • Export market demands 80% of cars produced in the UK. • Car exports account for 13% of all goods exported. • There is a history of export subsidies in the EU - £30bn a year. • Subsidies go against principles of comparative advantage. • Export subsidies are needed to promote international competitiveness. • Brexit risks competitiveness of car industry – lack of frictionless trade and end of free movement of labour. Explanation requires candidates to go beyond what is given in the case study. As the question refers to impact (either positive or negative) a counter argument should also be rewarded. It may include: • Subsidising exports will reduce the price of car exports, making them more internationally competitive. • Increased exports will have a positive impact on the current account. This injection into the circular flow will increase AD and cause
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- 1(d) Evaluate, using evidence from the stimulus material, the effectiveness of reducing regulation, such as planning permission, in order to increase the supply of housing and tackle the shortage of housing in the UK.

Level / mark	Descriptor
Level 2 (5-8 marks)	Good knowledge and understanding of relevant economic idea(s), principle(s) or model(s) Good application of economic concepts to the context and scope of the question, or some good use of data where appropriate. Strong analysis of the question characterised by consistently well-developed chains of reasoning; relevant diagram(s) which are accurate, integrated into the response and have no errors that affect the validity of the analysis. Strong evaluation of different perspectives on the question characterised by well-developed chains of reasoning; consideration of counter arguments / assumptions / limitations of theory / factors that determine significance / extent; a logical and well supported judgement.
Level 1 (1-4 marks)	Reasonable knowledge and understanding of relevant economic idea(s), principle(s) or model(s) Reasonable application of economic concepts to some elements of the given context and scope of the question, although possibly inconsistent or not always relevant. Relevant data may be referred to if / where appropriate. Reasonable analysis of the question characterised by undeveloped chains of reasoning in the form of single links; relevant diagram(s) which have errors that affect the validity of the analysis or are not integrated into the response. Limited evaluation of different perspective(s) on the question characterised by simple statement(s) related to counter arguments / assumptions / limitations of theory / factors that determine significance / extent; a stated judgement or the absence of a judgement.

38* Evaluate, using the information in Extract 3, whether firefighter pay is likely to increase.

Level / mark	Descriptor
Level 2 (5-8 marks)	Good knowledge and understanding of relevant economic idea(s), principle(s) or model(s) Good application of economic concepts to the context and scope of the question, or some good use of data where appropriate. Strong analysis of the question characterised by consistently well-developed chains of reasoning; relevant diagram(s) which are accurate, integrated into the response and have no errors that affect the validity of the analysis. Strong evaluation of different perspectives on the question characterised by well-developed chains of reasoning; consideration of counter arguments / assumptions / limitations of theory / factors that determine significance / extent; a logical and well supported judgement.
Level 1 (1-4 marks)	Reasonable knowledge and understanding of relevant economic idea(s), principle(s) or model(s) Reasonable application of economic concepts to some elements of the given context and scope of the question, although possibly inconsistent or not always relevant. Relevant data may be referred to if / where appropriate. Reasonable analysis of the question characterised by undeveloped chains of reasoning in the form of single links; relevant diagram(s) which have errors that affect the validity of the analysis or are not integrated into the response. Limited evaluation of different perspective(s) on the question characterised by simple statement(s) related to counter arguments / assumptions / limitations of theory / factors that determine significance / extent; a stated judgement or the absence of a judgement.

1	d	ii	Evaluate the impact of the increase in reliable energy supplies on the service sector in Uganda. Level 2 (5–8 marks) Good knowledge and understanding of the possible changes in the Ugandan markets in a context provided by the candidate. Good – Strong analysis of the ways in which markets are inter-related. • Good analysis will be in the form of developed links. These links are developed through a chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct and linked to the analysis. • Strong analysis will have consistently well-developed links through a coherent chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis. Reasonable – Strong evaluation of the interaction between markets in the Ugandan economy considering both sides and underpinned by appropriate theoretical analysis. • Good evaluation will weigh up both sides but without reaching a supported judgement. • Strong evaluation should include a supported judgement.	8 (AO1 x 1 AO2 x 1 AO3 x 3 AO4 x 3) For a mark at the top of each level evidence must be provided from the stimulus material and / or the candidate's own knowledge. An increase in energy supply due to the growth in solar power, <i>ceteris paribus</i>, leads to a fall in price. This may lead to an increase in supply in the service sector (as the growth in mobile phones, Internet and social media, currently underway in Uganda, rely on energy). However, there is also evidence that the improved supply of power, especially light, helps to improve the earning ability of Ugandans (there is plenty of reference to lives being transformed, Ritah being able to support her grandchildren and potential GDP growth of 2%). This would lead to an increase in demand. Answers are likely to consider the overall impact on the service sector. As both supply and demand are likely to shift to the right then quantity will increase. However, the impact on price will depend on the relative size of the shifts in demand and supply (and the PED/PES). Better answers may consider the impact of the income inelastic demand for services (OFR) on the size of the shift in the demand schedule. Consideration may also be given to the larger long-run impact on both supply and demand of the increased access to education made possible by the availability of cheap solar power.
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36		Evaluate, using the information in Extract 2, whether the likely objective of a private sector water or electricity firm justifies taking them into public ownership. Level 2 (5–8 marks) Good knowledge and understanding of objectives of firms. Good – strong analysis of whether the likely objective of a private sector water or electricity firm justifies taking them into public ownership. Good analysis will be in the form of developed links. These links are developed through a chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct and linked to the analysis. Strong analysis will have consistently well-developed links through a coherent chain of reasoning which addresses the	8 AO1 x 1 AO2 x 1 AO3 x 2 AO4 x 4	Guidance: • Whilst most candidates will start their answer explaining why the profit maximising nature of private sector firms justifies nationalisation, the reverse approach is equally valid. • The side of the argument presented first should be credited as Analysis, with the other side credited as Evaluation. • Strong evaluation requires an explained judgement. An explained judgement without Good evaluation can be credited as evaluation.
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1	e	Evaluate two factors which may determine the value of the price elasticity of demand for air travel. Level 2 (5–8 marks) Good knowledge and understanding of the concept of PED and two factors which affect it in a context provided by the candidate. Good – Strong analysis of the factors which affect PED. • Good analysis will be in the form of developed links. These links are developed through a chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct and linked to the analysis. • Strong analysis will have consistently well-developed links through a coherent chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis. Reasonable – Strong evaluation of the factors which determine the value of PED for air travel, considering both sides and underpinned by appropriate theoretical analysis. • Good evaluation will weigh up both sides but without reaching a supported judgement. • Strong evaluation should include a supported judgement. Level 1 (1–4 marks) Limited – Reasonable knowledge and understanding of the concept of PED and/or a factor which affects it in a context provided by the candidate. Limited – Reasonable analysis of a factor which affects PED. • Limited analysis will have little evidence of reasoning that addresses the question asked. There is a lack of a clear structure.	8 (AO1 x 1 AO2 x 1 AO3 x 3 AO4 x 3) PED may be affected by a number of factors. Availability of substitutes: The more substitutes available the higher the PED, as customers will be able to switch more easily if price changes. Although easyJet are the largest airline in the UK, Table 1 shows that there are 4 or 5 other large competitors. There is also evidence of growing substitutability of rail travel which may affect PED. Necessity or luxury: A necessity will be less responsive to a price change. This may be the case for business travellers who have to travel for a meeting and may have less choice over what time to travel. On the other hand, holiday travellers may regard air travel as a luxury and may have more substitutes available. Time period: PED is likely to be greater the longer the time period under consideration. This will be affected by the changes in the travel market generally, for example, the increased delays of air travel which is making train travel more attractive. Width of market definition: The PED for easyJet (or any other airline) will be greater than the market as a whole. Brand loyalty: The greater the degree of brand loyalty the more likely customers will not change demand if prices increase. As market leader, and with its distinctive branding as well as customer loyalty programme, easyJet may have a lower PED than its competitors. Percentage of a consumer's income spent on a good: Although the price of flights can be quite high, for most people it is an occasional purchase. This will make PED more price inelastic.
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33	Evaluate, using an appropriate diagram(s), whether unhealthy food is a demerit good. Level 2 (5–8 marks) Good knowledge and understanding of demerit goods. Good – strong analysis of whether unhealthy food is a demerit good. Good analysis will be in the form of developed links. These links are developed through a chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct and linked to the analysis. Strong analysis will have consistently well-developed links through a coherent chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis. Reasonable – strong evaluation of whether unhealthy food is a demerit good. Good evaluation will weigh up both sides/comparing alternatives but without reaching a supported judgment. Strong evaluation should include a supported judgment. Level 1 (1–4 marks)	8 AO1 x 1 AO2 x 1 AO3 x 2 AO4 x 4 Guidance: - A number of limited analytical/evaluative points can be awarded up to Reasonable, but to be awarded Good or Strong there needs to be greater depth of explanation. - A relevant and explained diagram is required for the Analysis or Evaluation to be awarded above Reasonable. - Whilst most candidates will start their answer explaining why unhealthy food is a demerit good, the reverse approach is equally valid. - The side of the argument presented first should be credited as Analysis, with the other side credited as Evaluation. - Strong evaluation requires an explained judgement. An explained judgement without Good evaluation can be credited as evaluation. Knowledge & Understanding: Knowledge & Understanding marks should be awarded for material that is given in the case study: - Unhealthy food adverts affect what children eat in the short and long term. - People already have sufficient information to
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1	e	*	Evaluate, using evidence from the stimulus material, the factors which may influence the choice of objectives for a firm such as Shell. Level 3 (9–12 marks) Good knowledge and understanding of factors affecting the choice of objectives, supported by the evidence in the stimulus material and / or the candidate's own knowledge and understanding. Good – Strong analysis of how factors affect the choice of objectives. • Good analysis will be in the form of developed links. These links are developed through a chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct and linked to the analysis. • Strong analysis will have consistently well-developed links through a coherent chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis. Good – Strong evaluation of factors affecting objectives, weighing up points of view/comparing alternatives. • Strong evaluation should include a supported judgment. <i>There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.</i>	12 (AO1 x 1 AO2 x 1 AO3 x 5 AO4 x 5) For a mark at the top of each level evidence must be provided from the stimulus material and / or the candidate's own knowledge. Knowledge and understanding of objectives • maximisation objectives - profit, sales revenue, sales volume, growth and utility • non-maximising objectives - profit satisfying, social welfare, corporate social responsibility (CSR) Knowledge and understanding of factors • ownership • managers • market environment • government policy • pressure groups
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1	e	*	The concept of rationality helps economists to understand the behaviour of economic agents. Evaluate, using evidence from the stimulus material, how rationality may help is to understand the behaviour of firms. Level 3 (9–12 marks) Good knowledge and understanding of the role of rationality and/or different economic agents, supported by the evidence in the stimulus material and / or the candidate's own knowledge and understanding. Good – Strong analysis of how rationality may help to explain the behavior of different economic agents. • Good analysis will be in the form of developed links. These links are developed through a chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct and linked to the analysis. • Strong analysis will have consistently well-developed links through a coherent chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis. Good – Strong evaluation of the role of rationality and whether it helps to explain the behaviour of economic agents, weighing up points of view/comparing alternatives. • Strong evaluation should include a supported judgment. <i>There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.</i>	12 (AO1 x 1 AO2 x 1 AO3 x 5 AO4 x 5) For a mark at the top of each level evidence must be provided from the stimulus material. Most economic theory assumes that economic agents behave rationally. They will balance the marginal benefit against the marginal cost when each decision is made. For example, firms seek to profit maximise. Evidence in the stimulus material may be used to argue for or against rationality being of use include: • Samuel Mukisa is spending his own money to help his students to study. How does he benefit from this cost? • Large multinational organisations, such as Shell and Engie, may be more likely to operate rationally and make decisions based on profit-maximising behaviour. • Local start-ups and smaller firms, such as BBOX, are less likely to be profit-maximising in the short-run, but see the long-term potential of any decision made now to invest in this industry. • Fenix is clearly growing and so may be operating rationally. On the other hand, the Chief Executive is quoted as saying that she wants to have a positive impact. In fact, she suggests that it is possible to be both successful commercially and have a positive impact. Is this suggesting a satisficing approach to objectives? Candidates may consider the role of different non-maximising objectives in their answer. Better answers may consider the assumption of rational behaviour. Does a firm always aim to maximise profits (e.g. this may be unlikely for the
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36	Evaluate, using the information in Extract 3, the extent to which the Paris Accord and tradable pollution permit schemes will be effective in solving environmental market failure. Level 3 (11–15 marks) Good knowledge and understanding of the Paris Accord and tradable pollution permit schemes. Good – strong analysis of how the Paris Accord and tradable pollution permit schemes will be effective in solving environmental market failure. Good analysis will be in the form of developed links. These links are developed through a chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct and linked to the analysis. Strong analysis will have consistently well-developed links through a coherent chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis. Good - strong evaluation of the extent to which the Paris Accord and tradable pollution permit schemes will be effective in solving environmental market failure, weighing up both sides/comparing alternatives. Strong evaluation should include a supported judgment. <i>There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.</i> Level 2 (6–10 marks) Good knowledge and understanding of the Paris Accord and tradable pollution permit schemes.	15 (AO1 x 2 AO2 x 3 AO3 x 4 AO4 x 6)	Guidance: • A number of limited analytical/evaluative points can be awarded up to Reasonable, but to be awarded Good or Strong there needs to be greater depth of explanation. • Strong evaluation requires an explained judgement. An explained judgement without Good evaluation can be credited as evaluation. • The analysis must be based on the advantages of the Paris Accord and tradable permits scheme, not other policies. • Analysis of alternative policy solutions should not be credited unless the candidate is using this to directly answer the question on the effectiveness of tradable permits or the Paris Accord. Knowledge & Understanding: Knowledge & Understanding marks should be awarded for arguments for and against the Paris Accord and tradable permits that are mentioned in the case study: - o 195 countries have committed to take action. - o Each country has made their own voluntary pledges to reduce emissions. - o Nicaragua didn't sign up to the agreement. - o US withdrew from agreement. - o Provides a loose fitting framework that got the backing of some of the world's biggest polluters. - o The ETS is the EU's tradable permits scheme. Analysis and Evaluation requires candidates to go beyond what is given in the case study. Analysis may include: • Multilateral agreements will reduce pollution more effectively than unilateral action, which is needed to solve the global problem of climate change. • Global agreements (such as the Paris Accord) are
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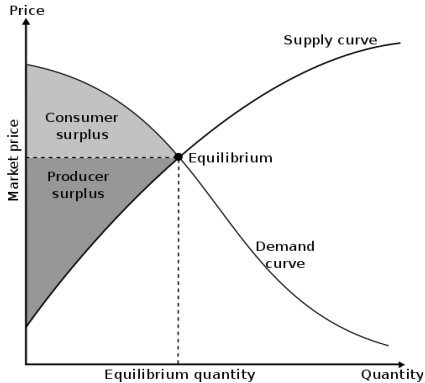
38	Evaluate, using the information in Extract 3, the extent to which deregulation of financial services would benefit the UK economy. Level 3 (11–15 marks) Good knowledge, understanding and application of deregulation. Good – strong analysis of how deregulation of financial services would or would not benefit the UK economy. Good analysis will be in the form of developed links. These links are developed through a chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct and linked to the analysis. Strong analysis will have consistently well-developed links through a coherent chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis. Good - strong evaluation of the extent to which deregulation of financial services would benefit the UK economy, weighing up both sides/comparing alternatives. Strong evaluation should include a supported judgment. <i>There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.</i>	15 (AO1 x 2 AO2 x 3 AO3 x 4 AO4 x 6)	• A number of limited analytical/evaluative points can be awarded up to Reasonable, but to be awarded Good or Strong there needs to be greater depth of explanation. • Strong evaluation requires an explained judgement. An explained judgement without good evaluation can be credited as evaluation. • The side of the argument presented first should be credited as Analysis, with the other side credited as Evaluation. Knowledge, Understanding and Application: Knowledge, Understanding and Application marks should be awarded for material that is given in the case study: • Brexit meant financial services firms lost their passporting rights, which could increase complexity and cost. • Some financial services firms have relocated away from London. • Financial services is an important element of the UK economy, contributing to current account surplus on trade in services. • Deregulation could include removing caps on bankers' bonuses and reducing capital adequacy ratios. • Deregulation risks creating systemic risk and causing another financial crisis.
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34	Evaluate, using the information in Extract 2, whether economic agents benefit from the food industry becoming more contestable. Level 3 (11–15 marks) Good knowledge and understanding of contestable markets. Good – strong analysis of whether economic agents benefit from the food industry becoming more contestable. Good analysis will be in the form of developed links. These links are developed through a chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct and linked to the analysis. Strong analysis will have consistently well-developed links through a coherent chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis. Good - strong evaluation of whether economic agents benefit from the food industry becoming more contestable.	15	Guidance: • A number of limited analytical/evaluative points can be awarded up to Reasonable, but to be awarded Good or Strong there needs to be greater depth of explanation. • Strong evaluation requires an explained judgement. An explained judgement without Good evaluation can be credited as evaluation. • The side of the argument presented first should be credited as Analysis, with the other side credited as Evaluation. • Consideration of the impact on more than one economic agent is needed to take the analysis beyond Reasonable. Knowledge & Understanding: Knowledge & Understanding marks should be awarded for material that is given in the case study: ○ Supermarkets offering special deals to avoid
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37	Evaluate, using the information in Extract 3, the extent to which emerging economies gain more from international trade than developed economies. Level 3 (11–15 marks) Good knowledge and understanding of international trade. Good – strong analysis of how emerging economies might gain more from international trade than developed economies. Good analysis will be in the form of developed links. These links are developed through a chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct and linked to the analysis. Strong analysis will have consistently well-developed links through a coherent chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis. Good - strong evaluation of the extent to which emerging economies gain more from international trade than developed economies, weighing up both sides/comparing alternatives. Strong evaluation should include a supported judgment. <i>There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.</i> Level 2 (6–10 marks) Good knowledge and understanding of international trade. Reasonable analysis of how emerging economies might gain more from international trade than developed	15 (AO1 x 2 AO2 x 3 AO3 x 4 AO4 x 6)	Guidance: • A number of limited analytical/evaluative points can be awarded up to Reasonable, but to be awarded Good or Strong there needs to be greater depth of explanation. • An answer which talks generally about the benefits and costs of international trade without applying it to the question cannot be awarded beyond Limited analysis or evaluation. • An answer which talks about the benefits and costs of international trade to emerging economies without comparing to the impacts on developed economies cannot be awarded beyond Reasonable analysis or evaluation. • Strong evaluation requires an explained judgement. An explained judgement without Good evaluation can be credited as evaluation. • The side of the argument presented first should be credited as Analysis, with the other side credited as Evaluation. Knowledge & Understanding: Knowledge & Understanding marks should be awarded for material that is given in the case study: ○ High rates of economic growth are essential to emerging economies to overcome poverty. ○ Brazil's growth occurred because of trade liberalisation. ○ Brazil is one of the world's largest producers of
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3	*	A report for the charity Action on Smoking and Health (ASH) in January 2022 estimated that smoking in England imposed costs on the NHS totalling £2.4 billion and costs on businesses, from lost productivity, of £17.2 billion. Evaluate, using an appropriate diagram(s), the most effective method of government intervention to reduce the negative externalities from smoking in England. Level 5 (21–25 marks) Good – Strong knowledge and understanding of methods of government intervention to reduce the negative externalities from smoking Strong analysis of how method of government intervention may reduce the negative externalities from smoking. It will have consistently well-developed links through a coherent chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis. Strong evaluation of the most effective method of government intervention to reduce the negative externalities from smoking, comparing alternatives and reaching a supported judgment. <i>There is a well-developed and sustained line of reasoning which is coherent and logically structured. The information presented is entirely relevant and substantiated.</i>	25 (AO1 x 6 AO2 x 6 AO3 x 6 AO4 x 7)	<table><tr><th colspan="3">Annotation</th></tr><tr><td>Knowledge and Understanding</td><td>KU</td><td>Grouped at end of response</td></tr><tr><td rowspan="2">Application</td><td>APP ✓</td><td rowspan="2">End of response</td></tr><tr><td>APP ✗</td></tr><tr><td>Analysis</td><td>AN</td><td>Grouped beside the body of the analysis</td></tr><tr><td>Evaluation</td><td>EVAL</td><td>Grouped beside the body of the evaluation</td></tr></table> Knowledge and understanding - negative externalities as spill-over effects on third parties - negative consumption externalities where MSB < MPB resulting in over-consumption - methods of government intervention to reduce negative externalities – taxation, provision of information, promotion of alternatives Context(s) - costs imposed on the NHS arising from treatment of smoking-related diseases - impacts on children’s health from smoking during pregnancy and second-hand smoke - impact on ability to work – lost productivity, absenteeism, reduced ability to work	Annotation			Knowledge and Understanding	KU	Grouped at end of response	Application	APP ✓	End of response	APP ✗	Analysis	AN	Grouped beside the body of the analysis	Evaluation	EVAL	Grouped beside the body of the evaluation
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4	*	Flood defences are considered by economists to be public goods. The £67.4 million Ipswich tidal flood barrier is just one of the many flood defence schemes which has been completed during the government's current capital investment programme. The scheme protects 1600 homes and 400 businesses from tidal flooding. Evaluate the case for government provision of goods and services such as the Ipswich flood defence scheme. Level 5 (21–25 marks) Good – Strong knowledge and understanding of the consequences of government failure as a result of government intervention. Strong analysis of the consequences of government failure. It will have consistently well-developed links through a coherent chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis. Strong evaluation of whether government failure is an acceptable consequence of government intervention, weighing up both sides/comparing alternatives and reaching a supported judgment. <i>There is a well-developed and sustained line of reasoning which is coherent and logically structured. The information presented is entirely relevant and substantiated.</i>	25 (AO1 x 6 AO2 x 6 AO3 x 6 AO4 x 7)	<table><tr><th colspan="3">Annotation</th></tr><tr><td>Knowledge and Understanding</td><td>KU</td><td>End of response</td></tr><tr><td rowspan="2">Application</td><td>APP ✓</td><td rowspan="2">End of response</td></tr><tr><td>APP ✗</td></tr><tr><td>Analysis</td><td>AN</td><td>Grouped beside the body of the analysis</td></tr><tr><td>Evaluation</td><td>EVAL</td><td>Grouped beside the body of the evaluation</td></tr></table> Knowledge and understanding • nature of public goods • characteristics of public goods • free rider problem • provision of public goods Context(s) • flood defences • street lighting • national defence • roads • parks	Annotation			Knowledge and Understanding	KU	End of response	Application	APP ✓	End of response	APP ✗	Analysis	AN	Grouped beside the body of the analysis	Evaluation	EVAL	Grouped beside the body of the evaluation
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Evaluation	EVAL	Grouped beside the body of the evaluation																		

2	*	Price ceilings have been used in a number of different markets, ranging from rented housing in New York to food in Venezuela and the cap on energy bills in the UK. Evaluate, using an appropriate diagram(s), the impact a price ceiling may have on the level of consumer and producer surplus in a market.
		Level 5 (21–25 marks) Good – Strong knowledge and understanding of a price ceiling, how it operates and the effect it would have on the level of consumer and producer surplus in a market. Strong analysis of how a price ceiling may affect consumer and producer surpluses will have consistently well-developed links through a coherent chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis. Strong evaluation of the impact of a price ceiling on consumer and producer surpluses considering extent and how this may be affected and reaching a supported judgment. <i>There is a well-developed and sustained line of reasoning which is coherent and logically structured. The information presented is entirely relevant and substantiated.</i>
		25 (AO1 x 6 AO2 x 6 AO3 x 6 AO4 x 7) Consumer surplus is the difference between the value to buyers (shown by the demand schedule) and what they actually pay. Producer surplus is the difference between the market price and the price at which a producer is prepared to supply (shown by the supply schedule).  A price ceiling which lowers the price below the

4	*	Within any economy there is a great deal of specialisation by firms in the production of particular products, such as manufacturing of cars by BMW, Nissan and Toyota in the UK. Each manufacturer employs the division of labour. So some workers design cars, some test them, others market them and the assembly itself is divided into many different tasks. Evaluate the extent to which specialisation and the division of labour might help in addressing the basic economic problem.
		Level 5 (21–25 marks) Good – Strong knowledge and understanding of specialisation and the division of labour and how it is relevant to the basic economic problem. Strong analysis of how specialisation and the division of labour might help in addressing the basic economic problem will have consistently well-developed links through a coherent chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis. Strong evaluation as to the extent to which specialisation and the division of labour might help in addressing the basic economic problem, weighing up both sides/comparing alternatives and reaching a supported judgment. <i>There is a well-developed and sustained line of reasoning which is coherent and logically structured. The information presented is entirely relevant and substantiated.</i>
	25	The basic economic problem is one of scarcity where the unlimited wants of society cannot be matched by the finite resources in existence. Specialisation is when an individual or country concentrates on a product or task. Division of labour is a type of specialisation where the production of a good is broken up into separate tasks each performed by one person or a small group of people. The benefits from both specialisation and division of labour may be shown using a PPF diagram where an individual or country can increase its efficiency and achieve a point above its current productive potential. Specialisation may help in addressing the basic economic problem in the following ways: • Higher output: A higher output at lower unit costs means more wants and needs might be satisfied with a given amount of scarce resources • Variety: Consumers have improved access to a greater variety of higher quality products, i.e. they have more and better choice both from their own economy and from the production of other countries • A bigger market: Specialisation and international trade increase the size of the market offering opportunities for economies of scale • Competition and lower prices: Increased competition for domestic producers acts as an

4	*	“A £1.4bn bailout has been announced for Crossrail, as Europe’s biggest infrastructure project to build a new underground line across London is once again over budget and delayed. This is yet another example of a failed government-financed and managed project.” Evaluate whether governments should finance large infrastructure projects such as Crossrail. Level 5 (21–25 marks) Good – Strong knowledge and understanding of the consequences of government failure as a result of government intervention. Strong analysis of the consequences of government failure. It will have consistently well-developed links through a coherent chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis. Strong evaluation of whether government failure is an acceptable consequence of government intervention, weighing up both sides/comparing alternatives and reaching a supported judgment. <i>There is a well-developed and sustained line of reasoning which is coherent and logically structured. The information presented is entirely relevant and substantiated.</i>	25 (AO1 x 6 AO2 x 6 AO3 x 6 AO4 x 7) For a mark at the top of each level the response should be in context. Knowledge and understanding - external benefits - external costs - causes of government failure Context(s) - Crossrail - HS2 - Hinkley Point C - Thames Barrage Analysis – case for government financing - the private costs of large infrastructure projects are significant and occur over a long period of time - the private costs of large infrastructure projects include the acquisition of land and the construction costs - they are subject to uncertainty and are always likely to be larger than expected - they occur before the projects deliver private benefits in the form of revenue - the government is better placed than the private sector to raise finance at lower rates of interest and to bear risk because of the nature of these costs
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5	*	Supporters of a centrally planned economic system believe a central government can achieve social and national objectives more efficiently. For example, they highlight the increase in income inequality in China since it has introduced market-based reforms. Evaluate whether it is possible to allocate resources efficiently in a centrally planned economic system. Level 5 (21–25 marks) Good – Strong knowledge and understanding of how resources are allocated in a centrally planned economic system. Strong analysis of how resources are allocated in a centrally planned economic system. It will have consistently well-developed links through a coherent chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis. Strong evaluation of resource allocation in a centrally planned economic system, weighing up both sides/comparing alternatives and reaching a supported judgment. <i>There is a well-developed and sustained line of reasoning which is coherent and logically structured. The information presented is entirely relevant and substantiated.</i>	25 (AO1 x 6 AO2 x 6 AO3 x 6 AO4 x 7) For a mark at the top of each level the response should be in context. Knowledge and understanding - the process of resource allocation involves choices about how to deploy society's available resources across their different uses in relation to society's productive assets - What? How? For whom? - a centrally planned economy is an economic system where most resources are allocated by the state with the market mechanism having no (or a very small) part to play. - the government undertakes the coordination role, planning and directing the allocation of resources. - it owns most or all of the industries producing goods and services - there are some privately owned firms but these are closely directed by the state - it decides the goods to produce according to what it believes is most socially optimum - it decides what to produce through 5 or 10 year plans - it sets prices or directly rations goods and services Context(s) Reference to historical or current examples of centrally planned economies - Soviet Union 1917-1991 and Soviet Bloc - China until the late 70s - Cuba
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- 3 Be prepared to use the full range of marks. Do not reserve (e.g.) high Band marks 'in case' something turns up of a quality you have not yet seen. If an answer gives clear evidence of the qualities described in the band descriptors, reward appropriately.

B: TOTAL MARKS

4* Evaluate whether healthcare should be provided by the government.

OR

4	*	The total police budget in the UK for 2018/19 was £12.3bn, most of which was funded from taxation. This is an amount of money equivalent to £186 per person. Evaluate the effectiveness of state provision of public goods. Level 5 (21–25 marks) Good – Strong knowledge and understanding of the state providing public goods. Strong analysis will have consistently well-developed links through a coherent chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis. Strong evaluation of the effectiveness of the state providing public goods, weighing up both sides/comparing alternatives and reaching a supported judgment. <i>There is a well-developed and sustained line of reasoning which is coherent and logically structured. The information presented is entirely relevant and substantiated.</i>	25 (AO1 x 6 AO2 x 6 AO3 x 6 AO4 x 7)	For a mark at the top of each level the response should be in context. Public goods have two characteristics: • Non-rivalry (or non-diminishable) - consumption of the good by one person does not reduce the quality of the good available to others, e.g. Television • Non-excludable - it is impossible to stop others from benefitting from the product, e.g. Street lighting A public good can also be said to be 'non-rejectable' - no person can reject using the good, e.g. a country's nuclear defence weapons. With a true public good, such as street lighting, it is difficult to get people to agree to pay for it, as they will try to argue that they will not benefit from the street light and so not pay. This leads to an issue known as 'the free rider problem'. This means that someone can benefit from consumption of a product but not pay for it. Therefore, public goods are provided by the government paid out of taxation collected from all individuals and businesses. This is one of the main reasons for providing public goods as direct provision of a public good by the government can help to overcome the free-rider problem which leads to market failure. If the police force or defence were left to the private sector, many individuals would be unwilling to pay as they believe they get no utility from the service (or pretend they do not). The result would be that nobody would pay for the police and so the market would not provide it.
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5	*	NHS figures show that a declining number of children are receiving all their routine vaccinations, including meningitis and the combined measles, mumps and rubella (MMR) vaccine. In some cases, vaccination rates of children are as low as 90%. Evaluate the significance of information failure in decisions made about the consumption of merit goods. Level 5 (21–25 marks) Good – Strong knowledge and understanding of the role of information failure in making consumption decisions about merit goods. Strong analysis of the role of information failure in decisions to consume merit goods. It will have consistently well-developed links through a coherent chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis. Strong evaluation of whether information failure affects decisions when consuming merit goods, weighing up both sides/comparing alternatives and reaching a supported judgment. <i>There is a well-developed and sustained line of reasoning which is coherent and logically structured. The information presented is entirely relevant and substantiated.</i>	25 (AO1 x 6 AO2 x 6 AO3 x 6 AO4 x 7) For a mark at the top of each level the response should be in context. A merit good is one which the government believes will be under-consumed in a free market. As people may not fully recognise the benefits to be gained from consumption of the good, they will demand less than is socially desirable. Examples may include education, healthcare and insurance. For a market to perform its role in allocating resources, all economic agents (i.e. buyers and sellers) need to have full and accurate information about market conditions; otherwise, they will not be able to make rational decisions. If only one group of agents (or one side of the economic transaction) have this information (known as 'asymmetric information') then information failure is said to occur (which may lead to market failure, in the form of an inefficient or sub-optimal level of consumption). For example, the main beneficiary of education is the child (and arguably the economy) who is unlikely to be paying for the education or making the decision about how much to consume. The parents may wish to pay as little as possible for the education, but it is in the child's best interest to have as much education as possible (the 'principal agent problem'). Healthcare is another good example of a market where asymmetric information affects the consumption of merit goods. If a doctor tells you to have an injection or medical procedure which will benefit you (and society), only the doctor really knows or understands what will be involved (and how safe or painful it will be). The consumer may only be interested in themselves, so the idea of
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