

WORKBOOK

AQA A-LEVEL

Economics



TOPICS 1–8

Individuals, firms, markets and
market failure

David Horner
Steve Stoddard

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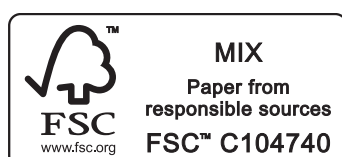
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About this book

- 1 This workbook will help you to prepare for AQA A-level Economics Topics 1–4.
- 2 Topics 1–4 could be assessed in:
 - A-level Paper 1, which lasts for 2 hours and covers Topics 1–4. Paper 1 is worth 35% of the A-level. There is a mixture of short and long answer questions, worth 76 marks. There are also some questions requiring extended response answers worth 15 marks.
 - A-level Paper 3, which lasts for 2 hours and covers Topics 1–8. Paper 3 is worth 30% of the A-level. Section A has structured questions, including practical techniques, worth 38 marks. Some questions require critical analysis of experimental data, worth 15 marks. Section B requires one essay from a choice of two titles and is worth 25 marks.
- 3 For each topic in this workbook there are:
 - stimulus materials, including key terms and concepts
 - short-answer questions that build up to exam-style questions
 - spaces for you to write or plan your answers
 - questions that test your mathematical skills
- 4 Answering the questions will help you to build your skills and meet the assessment objectives AO1 (knowledge and understanding), AO2 (application), AO3 (analysis) and AO4 (evaluation). Quantitative skills will make up a minimum of 20% of the total marks across the A-level.
- 5 Worked answers are included throughout the practice questions to help you understand how to gain the most marks.
- 6 Icons next to the question will help you to identify:
 -  where your calculations skills are tested
 -  where questions draw on synoptic knowledge, i.e. content from more than one topic
 -  how long this question should take you
- 7 You still need to read your textbook and refer to your revision guides and lesson notes.
- 8 Marks available are indicated for all questions so that you can gauge the level of detail required in your answers.
- 9 Timings are given for the exam-style questions to make your practice as realistic as possible.
- 10 Answers are available at: www.hoddereducation.co.uk/workbookanswers.

Topic 1 Economic methodology and the economic problem

Economic methodology and The nature and purpose of economic activity

Economics is a social science, which means that those who study it attempt to adopt a scientific approach to observing the behaviour of economic agents. Economists make a distinction between positive economic statements, which can be tested in a scientific way, and normative statements, which cannot.

Practice questions



AO1: Knowledge and understanding

- 1** Define the term 'economics'. **3 marks**

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- 2** Distinguish between a 'need' and a 'want' in economics. **3 marks**

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- 3** Explain why economics is referred to as a social science. **3 marks**

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AO2: Application

- 4** Outline the methodology an economist might use to test whether a fall in price leads to an increase in the quantity demanded of cars. **4 marks**

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- 5** Give an example of a positive statement. **2 marks**

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- 6** Give an example of a normative statement. **2 marks**

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AO3: Analysis

- 7** Explain why the definition of a want and a need may differ between countries. **4 marks**

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- 8** Explain how a market economy might answer the fundamental questions of what and how to produce. **4 marks**

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- 9** Explain how value judgements can influence government policy with regard to healthcare spending. **9 marks**

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Economic resources

Scarcity, choice and the allocation of resources

Societies have scarce or limited resources in relation to the unlimited wants of the population. These resources may be referred to as factors of production. Scarcity means that society must make choices in relation to how limited resources are allocated.

Practice questions



AO1: Knowledge and understanding

- 10** Briefly explain the basic economic problem. **4 marks**

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- 11** Define the term 'opportunity cost'. **3 marks**

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- 12** List and give an example of each of the four factors of production. **4 marks**

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AO2: Application

- 13** Describe an example of an opportunity cost situation facing an individual, a firm or the UK government. **4 marks**

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- 14** Explain why the environment might be regarded as a scarce resource. **4 marks**

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- 15** Using the following table, calculate the opportunity cost of increasing the output of bicycles from 300 to 400 units. **2 marks**

Bicycles	Cars
0	200
100	160
200	120
300	80
400	40
500	0

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- 16** Explain why governments must make choices in relation to the allocation of society's resources. **4 marks**

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- 17** Explain why countries must spend money on capital equipment in order to achieve economic growth in the long run. **4 marks**

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18 Explain how a government could increase the quantity of factors of production over time.

6 marks

Worked example

Factors of production are the economy's productive resources, including capital, enterprise, land and labour. In order to increase the quantity of capital, a government could use policies to encourage greater investment, such as reducing business taxes. This would give firms more money to spend on machinery etc. and would also allow businesses to keep more of their profits, which could also increase enterprise.

A01: Starts off well, with a clear and accurate definition of the key term.

A03: Clear, logical chain of explanation of how a specific policy could incentivise spending on capital equipment.

A03: Nicely recognises that this policy could also encourage entrepreneurs to set up in business, increasing another factor of production.

Production possibility diagrams

Economists often use diagrams as simplified models of the real world in order to illustrate particular concepts. The production possibility curve (PPC) can be used to highlight several fundamental concepts at both microeconomic and macroeconomic levels, including opportunity cost, efficiency and economic growth.

Practice questions



AO1: Knowledge and understanding

19 Define the term 'production possibility curve'.

3 marks

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20 List three factors that could lead to an outwards shift of an economy's PPC.

3 marks

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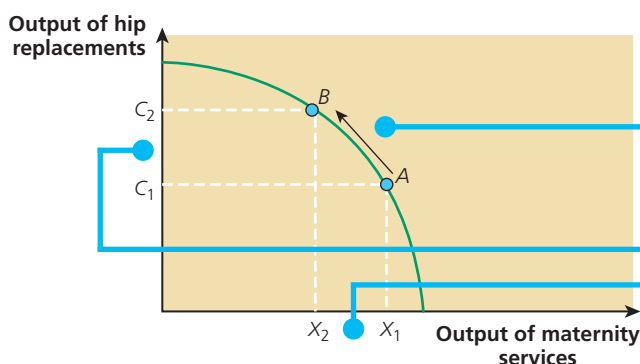
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AO2: Application

21 Draw a PPC diagram to illustrate the possible trade-off faced by a hospital that could offer either hip replacement operations or maternity services.

4 marks

Worked example

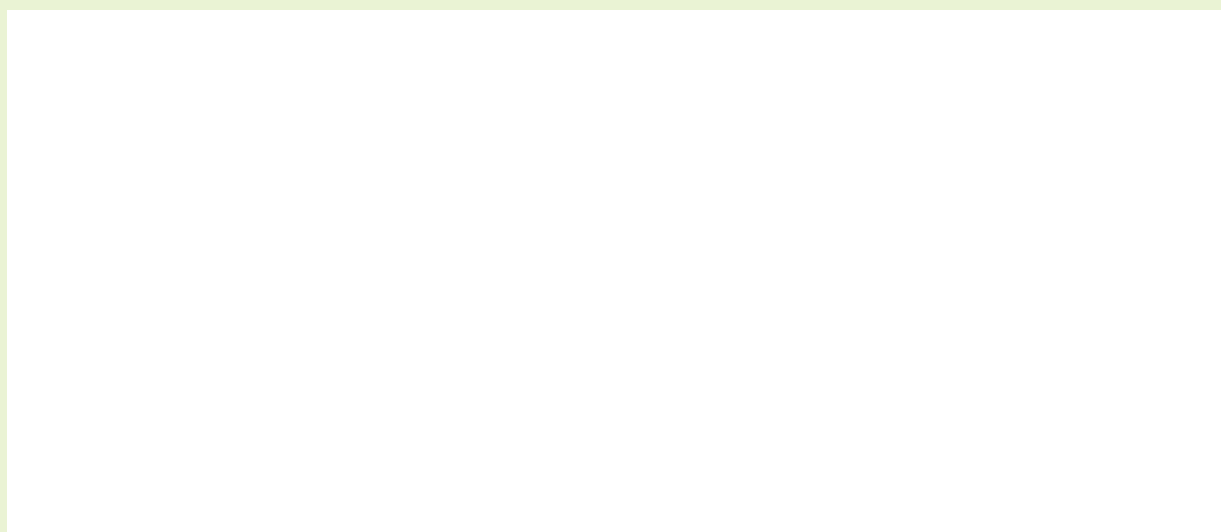


A02: The trade-off is clearly identified on the PPC diagram as there is a movement along the curve.

A02: This answer impressively emphasises the trade-off further by showing the magnitudes of hip replacements and maternity services lost/gained.

- 22** Draw *PPC* diagrams to illustrate the following situations:
- a** a productively efficient economy experiencing economic growth
 - b** an economy becoming more productive in capital goods but remaining at the same level in consumer goods

2 × 4 marks



AO3: Analysis

- 23** Explain how an economy's *PPC* could shift outwards over time.

6 marks

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- 24** Explain how a natural disaster could affect an economy's *PPC*.

6 marks

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- 25** Explain how a *PPC* diagram can be used to show economic efficiency.

6 marks

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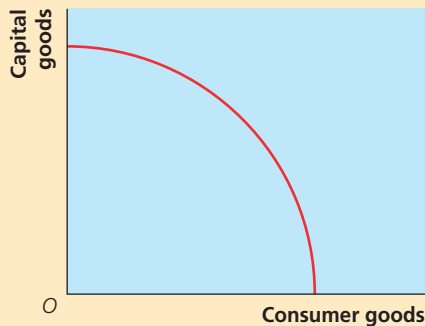
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Topic 1: Multiple choice and short answer

27

- 1 The main economic objective of firms in a market economy is assumed to be:
 - A achieving economies of scale
 - B achieving an efficient allocation of resources
 - C profit maximisation
 - D maximising consumer satisfaction
- 2 The existence of scarcity in an economy means that:
 - A it is impossible to maximise economic welfare
 - B there are no free goods
 - C individuals must make choices
 - D there is a misallocation of resources
- 3 Which one of the following is a factor of production?
 - A labour productivity
 - B a dentist's drill
 - C a worker's wages
 - D an entrepreneur's profits
- 4 When money is used as a medium of exchange:
 - A specialisation and the division of labour are not possible
 - B barter will increase
 - C prices do not change
 - D trade of goods and services will increase
- 5 The diagram below shows a production possibility curve for an economy.



When the economy is operating on its production possibility curve, an increase in the production of consumer goods will:

- A increase total output
 - B increase the opportunity cost of capital goods
 - C have no effect on the production of capital goods
 - D mean a reduction in the production of capital goods
- 6 Which one of the following would be classified by an economist as the factor of production known as labour?
 - A a factory
 - B a car
 - C a bricklayer
 - D a forest
- 7 A positive economic statement is always:
 - A based upon people's opinions
 - B capable of being tested
 - C correct
 - D based upon statistics



- 8 The following table shows the different combinations of two goods that can be produced by a single firm in an economy, namely plasma screen TVs and PC monitors.

Plasma TVs	PC monitors
0	20
1	16
2	12
3	8
4	4
5	0

Using the data in the table above, calculate the opportunity cost of increasing the production of plasma TVs from 2 to 3 units.

2 marks

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- 9 Using a diagram, explain three reasons why an economy's production possibility curve might shift inwards.

9 marks

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Exam-style questions



Topic 1: Data response

- 10 Read Extract A and Extract B and answer the following questions.

Extract A



The following table shows information about the UK housing market.

Year	% change in price of houses	Number of new houses supplied
2013	8.4	104,450
2014	8.3	132,320
2015	6.9	153,320
2016	5.2	180,320
2017	4.3	217,746
2018	2.0	222,190

Source: www.gov.uk, www.nationwide.co.uk

Extract B

The UK economy is facing a severe shortage of housing, with demand rising at a faster rate than supply. Demographic changes including population increases and a rise in the number of households have led to a rapid increase in demand to around 240,000 new houses per year which, due to supply increasing by less than this, has led to strong price rises.

The government has pledged to subsidise the building of affordable housing, relax planning controls and renovate the estimated 750,000 empty properties in the UK. There is a difficult choice for the government to make between building new houses, which cost around £90,000 each, or renovating empty houses at a cost of £10,000 each.



- a** Using Extract A, calculate the percentage change in new houses supplied between 2013 and 2018. Give your answer to 1 decimal place.

2 marks

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- b** Using Extracts A and B, explain how the data show that the economic problem could be applied to the UK housing market.

4 marks

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- c** With the help of a *PPC* diagram, illustrate and explain the opportunity cost situation facing the government's house building programme.

9 marks

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- d** Discuss whether the economic problem of scarcity can ever be resolved.

25 marks

Write your answer to this question on a separate piece of paper and keep it with your workbook.

Topic 2 Individual economic decision making

Consumer behaviour and Imperfect information

Traditional, neoclassical economic theory assumes that consumers always act rationally, seeking to maximise utility, or satisfaction, for every pound spent on each product they buy. The modern field of behavioural economics recognises that humans are unlikely to always make rational decisions. One reason for this is that consumers rarely possess all the information required to make fully informed decisions.

Practice questions



AO1: Knowledge and understanding

1 Define the term 'rational consumer'.

3 marks

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2 Explain what is meant by the term 'utility'.

3 marks

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3 Define the term 'asymmetric information'.

3 marks

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AO2: Application



4 Using the following table, calculate the marginal utility from consuming the fourth milkshake.

2 marks

Quantity of milkshakes	Total utility
1	250
2	410
3	550
4	620
5	660

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5 Explain the hypothesis of diminishing marginal utility, using chocolate bars as an example.

4 marks

Worked example

Diminishing marginal utility is where the satisfaction, or utility, gained from consuming each additional unit of a chocolate bar begins to decrease. For example, the satisfaction gained from consuming a tenth chocolate bar is likely to be much less than from consuming the first, probably because a consumer might begin to feel ill!

A01: Starts with a clear, accurate definition.

A02: Understanding of concept clearly applied to the example of chocolate bars.

- 6 Identify three markets you believe may be affected by asymmetric information. **3 marks**

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- 7 Explain why imperfect information may be a source of market failure. **4 marks**

Worked example

Imperfect information may lead to consumers buying the 'wrong' or sub-optimal amount of a product, or employers over- or under-employing certain individuals or groups. If either party to a transaction feels as if they have insufficient information to make a fully informed decision, imperfect information may lead to a mutually beneficial transaction not occurring, which may also be seen as market failure.

A01: Recognises that imperfect information can impact on factor markets as well as product markets.

A02: Imperfect information can lead to a transaction not taking place at all.

- 8 Outline two reasons why consumers may not possess all the relevant information required to make a fully informed decision about buying healthy food. **4 marks**

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- 9 Explain why buyers and sellers may possess different amounts of information in the markets for products such as second-hand cars and health insurance. **6 marks**

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Aspects of behavioural economic theory

Behavioural economics is a modern field of economic theory which recognises the social, moral and psychological factors that determine the behaviour of economic agents. It differs from traditional economic theory in the sense that it questions the assumption of individuals as rational decision makers. Several recent winners of the Nobel Prize for Economics have carried out research in the area of behavioural economics, including biases in decision making, such as altruism.

Practice questions



A01: Knowledge and understanding

- 10 Describe how traditional economic theory and behavioural economic theory differ in their assumptions about consumers' ability to maximise utility. **4 marks**

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11 Explain what is meant by the term 'bounded rationality'.

2 marks

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12 List three 'rules of thumb', or heuristics, that individuals may use when making decisions.

3 marks

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AO2: Application

13 Draw a diagram to illustrate each of the following:

- a** the effect on the gym market of bounded self-control
- b** altruism in relation to Fairtrade products
- c** the influence of social norms over time on wearing car seatbelts

3 × 4 marks

AO3: Analysis

14 With the help of a diagram, explain how the availability bias might lead to individuals over-estimating their requirement for snow-clearing equipment following a snowy winter.

9 marks

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15 Illustrate how a charity might use the bias of anchoring to increase donations. **4 marks**

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16 Explain how social norms may influence individuals' driving behaviour. **4 marks**

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Behavioural economics and economic policy

Insights provided by behavioural economic theory can help governments and other agencies devise policies that more effectively influence economic decisions. This may involve influencing the ways in which individuals' choices are 'framed' as well as 'nudging' people towards more desirable courses of action.

Practice questions



AO1: Knowledge and understanding

17 Explain the distinction between default choice, restricted choice and mandated choice. **6 marks**

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18 Define the term 'choice architecture'. **3 marks**

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19 Explain what is meant by a 'nudge'. **3 marks**

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AO2: Application

20 Draw a diagram to illustrate each of the following:

- a** nudging individuals to take more exercise
- b** framing the price of gym membership as 'less than £1 per day'
- c** making organ donation an opt-in choice

3 × 4 marks

AO3: Analysis

21 Explain how individuals could be 'nudged' towards making more desirable decisions with regard to healthy food choices.

4 marks

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22 With the help of a diagram, explain how mandating choices towards organ donation might influence the market towards more desirable outcomes.

9 marks

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AO4: Evaluation

- 23** Evaluate the effectiveness of behavioural economics policies in tackling health issues in the UK.

25 marks

The worked example below shows a model conclusion for this type of question. Study this closely and then attempt a full answer to the question on a separate piece of paper.

Worked example

In conclusion, behavioural economics policies can have a significant effect in tackling health issues in the UK. The key benefit of this set of policies is that they often cost very little to implement but can have sizeable benefits in terms of increasing the overall welfare of society. Some commentators, however, are critical of such policies, arguing that they give individuals an illusion of freedom of choice while causing them to act in ways deemed 'socially desirable' by the government. Furthermore, some economists argue that behavioural economics policies may not go far enough to solve the UK's health issues; rather than 'nudges' towards 'better' choices, individuals may need more coercion, e.g. in the form of traditional policies of indirect taxes, subsidies and minimum prices. Overall, therefore, I believe that behavioural economics policies should be used alongside more traditional policies of government intervention in order to successfully tackle health issues in the UK.

A01: Answer clearly refers back to the question in the first line of the conclusion.

A02: Candidate identifies the main justification for their judgement.

A03: Intelligently and articulately critiquing the policies.

A04: Shrewdly concluding that behavioural economics policies alone may not solve all the issues concerning health in the UK.

Exam-style questions



Topic 2: Multiple choice

- 1** A traditional economic assumption about consumer behaviour is:

- A bounded rationality
- B asymmetric information
- C utility maximisation
- D altruism



- 2** What is the marginal utility to a consumer from the third hamburger?

Quantity of hamburgers	Total utility
1	200
2	360
3	500
4	600
5	660

- A 60
- B 140
- C 100
- D 160

- 3** A rational consumer will always try to:

- A spend all of their income
- B maximise their earnings
- C take the views of others into account
- D maximise their total utility



4 Economic policy that takes behavioural theory into account is least likely to involve:

- A obliging consumers by law to opt in or out of organ donation
- B taking account of consumer altruism
- C giving consumers a limited range of preselected options
- D setting out all possible options

Exam-style questions



Topic 2: Data response

5 Read Extract A and Extract B and answer the following questions.



Extract A

Missed outpatient appointments in England and Wales, 2009–2015

2009	2010	2011	2012	2013	2014	2015
1,000,206	1,007,916	1,022,416	976,608	955,156	971,902	965,435

Source: www.england.nhs.uk

Extract B

The work of the Behavioural Insights Team

The Behavioural Insights Team (BIT) is a group of academic researchers created by the prime minister in 2010 to apply behavioural science to public policy. A recent piece of research by the BIT focused on reducing missed medical appointments. According to the NHS, 1 in 10 hospital outpatient appointments is missed, with people failing to turn up and failing to cancel or rearrange a slot. This amounts to 5.5 million missed appointments a year. This leads to consequences such as poorer health and subsequent costs to the NHS, as well as wasted resources.

The BIT worked to find a cheap solution to reduce the high number of missed appointments, leading to a projected 25% reduction in no-shows, from 11.1% to 8.5% of all appointments. The BIT experimented with various wordings used in text message reminders to patients, using understanding of behavioural economics. For example, some forms of wording referred to fairness, social norms and reducing costs to the NHS. The most effective text message was the one which emphasised the £160 cost to the NHS of missing an appointment.



- a Using Extract A, calculate, to 2 decimal places, the percentage change in missed outpatient visits in England and Wales between 2009 and 2015.

2 marks

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- b Explain the meaning of the following terms used in behavioural economics:
- i social norms
 - ii altruism

4 marks

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- c With the help of a diagram, explain how imperfect information surrounding healthcare can lead to under-consumption of medical services.

9 marks



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- d Using the data in the extracts and your economic knowledge, assess the potential contribution of behavioural economics to policies designed to improve the welfare of UK citizens.

25 marks

Write your answer to this question on a separate sheet of paper and keep it with your workbook.

Exam-style questions



Topic 2: Essay

- 6 Using examples to illustrate your answer, explain how imperfect information might affect individuals' decision making with regard to spending and/or saving.

15 marks



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- 7 The government is keen to encourage more people to place more of their income into a personal pension. Using your knowledge of both traditional economic theory and behavioural economics, assess alternative policies that the government might use to achieve its objective.

25 marks

Write your answer to this question on a separate sheet of paper and keep it with your workbook.