**Pearson Edexcel
Level 3 GCE**

Centre Number

Candidate Number

Economics A

**Advanced
Paper 1: Markets and Business Behaviour**

Tuesday 5 June 2018 – Afternoon
Time: 2 hours

Paper Reference
9EC0/01

You do not need any other materials.

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- There are three sections in this question paper. Answer **all** questions from Section A and Section B. Answer **one** question from Section C.
- Answer the questions in the spaces provided
  – *there may be more space than you need.*

Information

- The total mark for this paper is 100.
- The marks for **each** question are shown in brackets
  – *use this as a guide as to how much time to spend on each question.*
- Calculators may be used.

Advice

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

Turn over ▶

SECTION A

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

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

You are advised to spend 30 minutes on this section.

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

1 The diagram refers to production possibility frontiers for a country that produces capital goods and consumer goods.
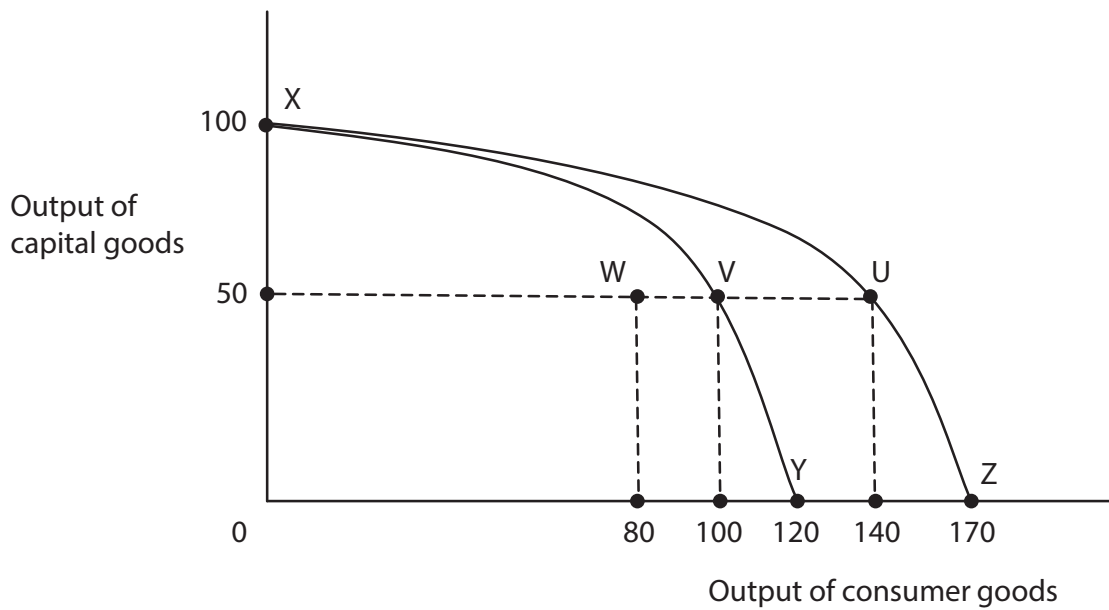
Originally, the economy has a production possibility frontier shown by the line **XY**, operating at point **V**. The production possibility frontier then moves to **XZ**, operating at point **U**.

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

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

(1)

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

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

⊠ **C** An increase in demand for consumer goods

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

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

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(Total for Question 1 = 5 marks)

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

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

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

(2)

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

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

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

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

(2)

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

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

(1)

☒ **A** exclusivity of Broomhill Sands

☒ **B** provision of a private good

☒ **C** provision of a public good

☒ **D** rivalry of Broomhill Sands

(Total for Question 2 = 5 marks)

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

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

(2)

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

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

(1)

☒ **A** 0.26

☒ **B** 3.62

☒ **C** 3.85

☒ **D** 7.40

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

(2)

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(Total for Question 3 = 5 marks)

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QUESTION 4 BEGINS ON THE NEXT PAGE.

4 Emily owns and operates a nail ink salon. The diagram shows the cost and revenue curves for treatments at her nail ink salon. Initially, Emily sets her price to maximise profits.

Costs, Revenue
per treatment (£)
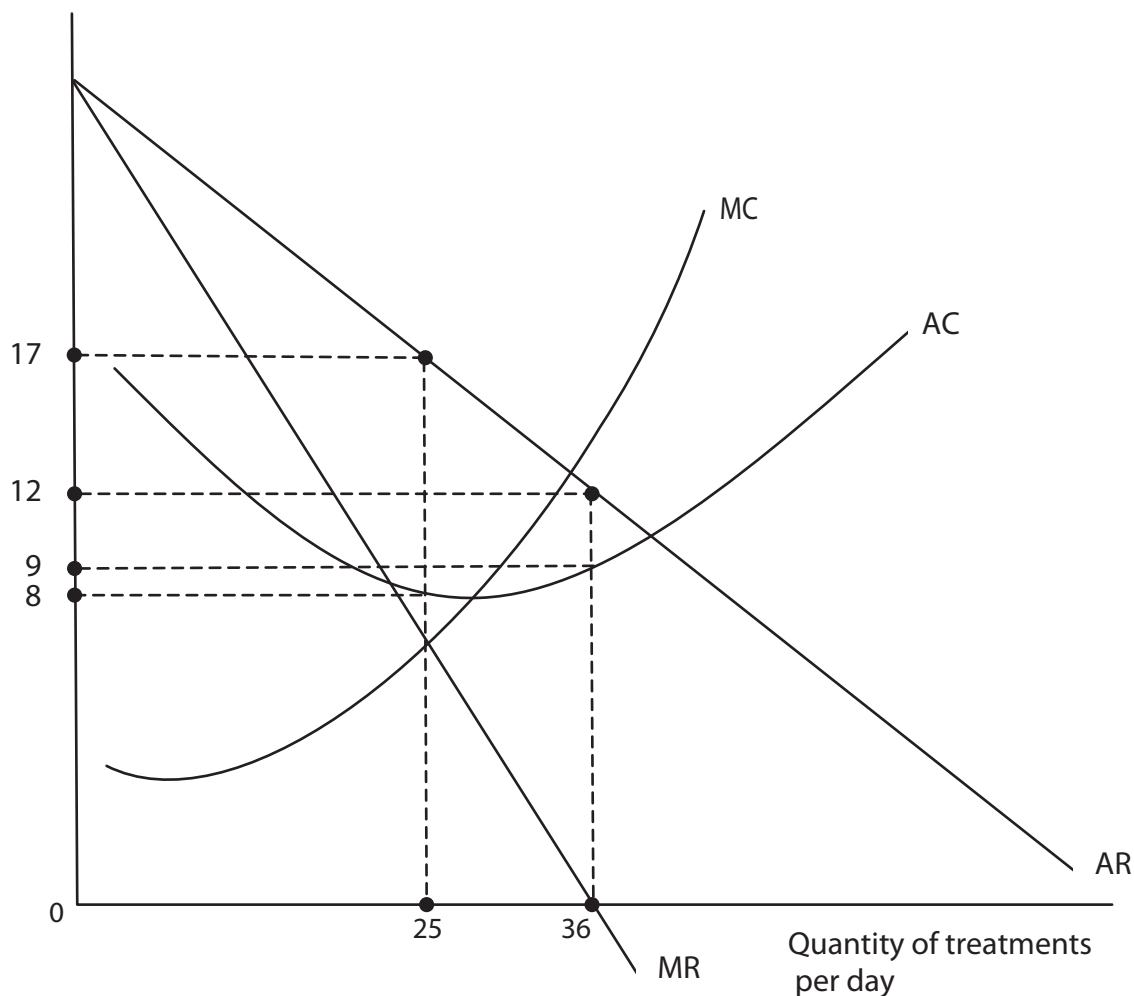
(a) Calculate the **change in total supernormal profit** if Emily changes her objective from profit maximisation to revenue maximisation. You are advised to show your working.

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(b) Emily now decides to change her objective from revenue maximisation to sales maximisation. This change will lead to:
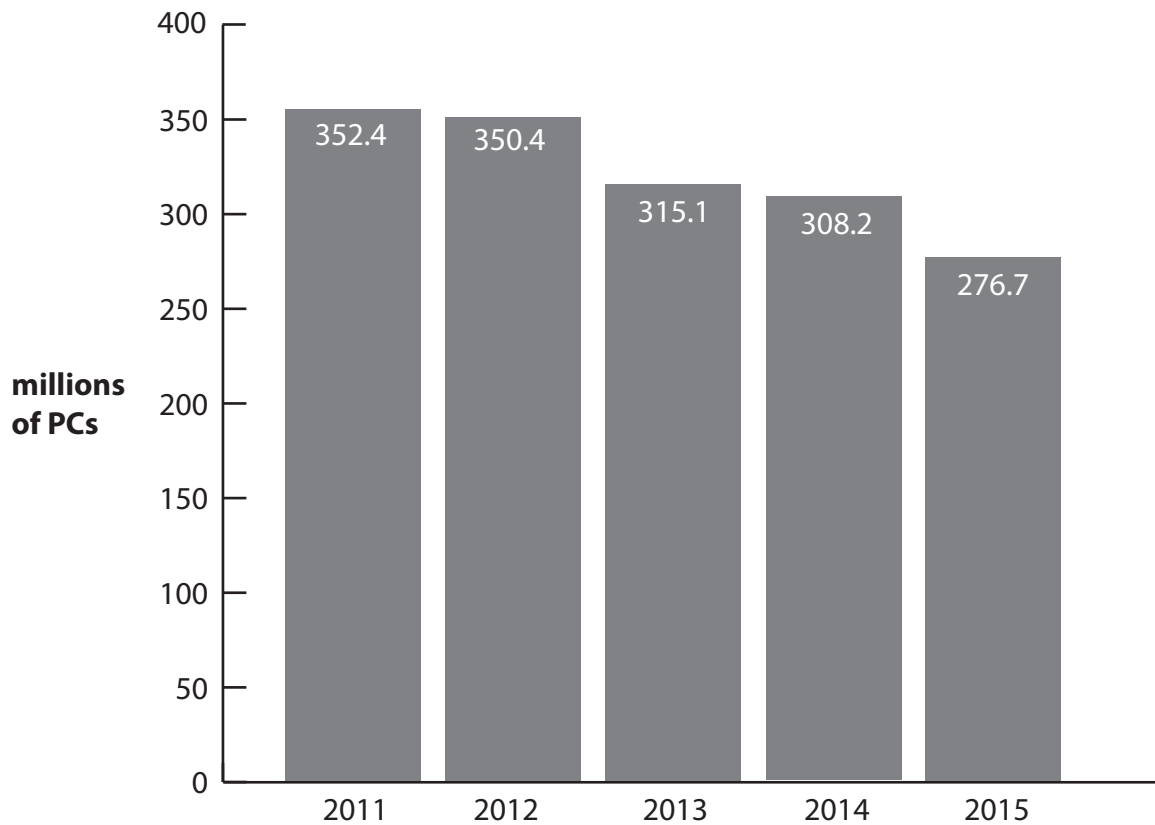
(1)

⊠　**A**　a decrease in the number of customers

⊠　**B**　a decrease in the price of treatments

⊠　**C**　an increase in productive efficiency

⊠　**D**　an increase in the level of profit

(Total for Question 4 = 5 marks)

P 5 2 3 1 6 A 0 1 1 4 0

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

millions of PCs

Year	Value
2011	352.4
2012	350.4
2013	315.1
2014	308.2
2015	276.7

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

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

(1)

☒ **A** 21.5

☒ **B** 27.3

☒ **C** 31.5

☒ **D** 75.7

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

(2)

P 5 2 3 1 6 A 0 1 3 4 0

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

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

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

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

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(Total for Question 5 = 5 marks)

TOTAL FOR SECTION A = 25 MARKS

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QUESTION 6 BEGINS ON THE NEXT PAGE.

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SECTION B

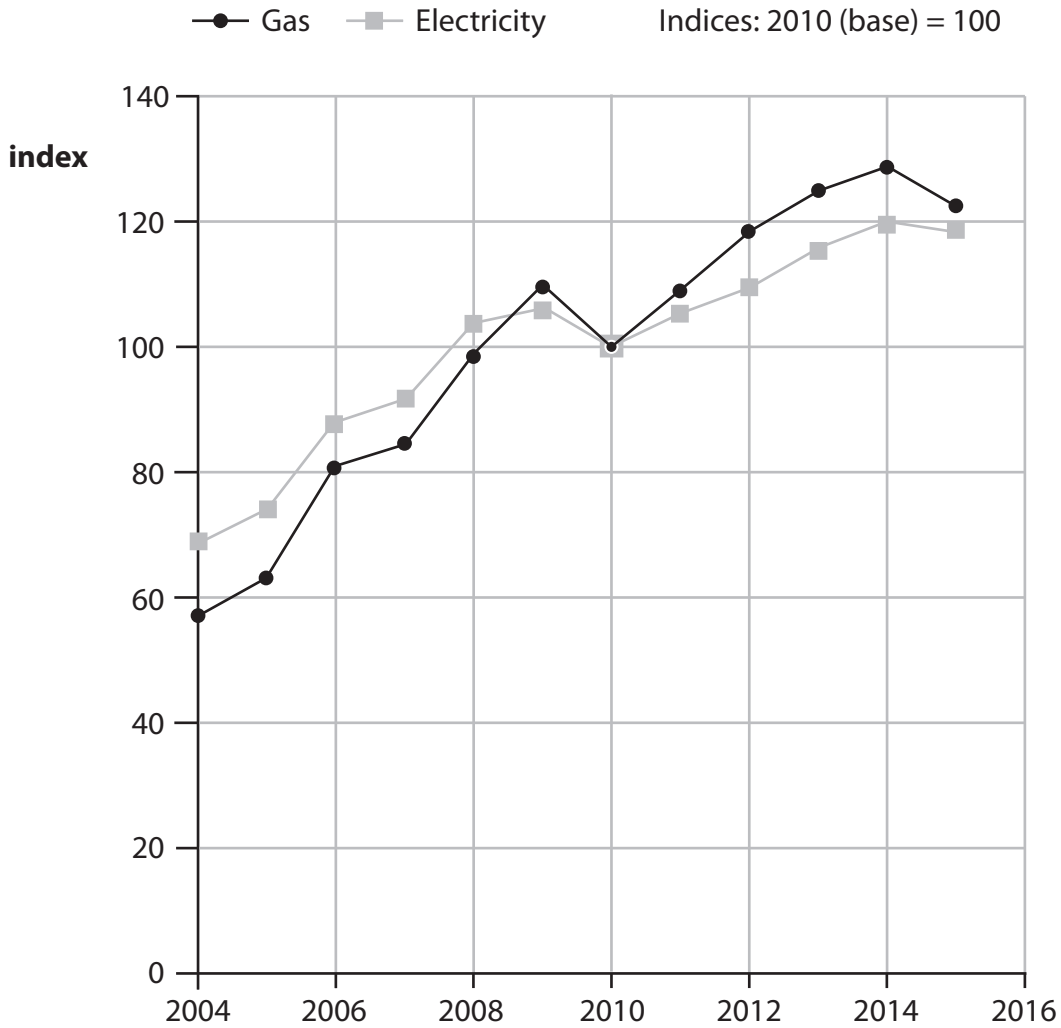**Read Figures 1 and 2 and the following extracts (A to C) before answering Question 6.**

Write your answers in the spaces provided.

You are advised to spend 1 hour on this section.

Question 6

The UK energy market

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

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

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

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

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

Extract A

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

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

5

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

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

10

- the creation of a database designed to help consumers switch energy suppliers – rival suppliers can directly contact these customers

- the conversion of all homes to smart energy meters making it easier for customers to measure energy consumption and switch supplier

15

- new rules to protect the four million vulnerable customers using prepaid meters – this includes a temporary price cap until smart meters have been installed.

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

Extract B

Proposals to regulate profits in the UK energy market

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

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

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

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

Extract C

Skills shortages in the UK energy sector

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

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

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

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

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

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6 (a) With reference to Figure 1, explain **one** likely reason for the overall trend in the real price of gas and electricity.

(5)

(b) With reference to Extract A, discuss the likely effectiveness of 'measures to open up and increase competition' in the UK energy market.

(12)

(c) With reference to Extract B, assess how the regulation of energy suppliers' profits is likely to affect consumers **and** suppliers in the energy market.

(10)

The price elasticity of demand for electricity in the UK is estimated to be −0.35 in the short run and −0.85 in the long run.

(d) With reference to Extract A and your own knowledge, examine **two** possible reasons for the change in price elasticity of demand for electricity over time.

(8)

(e) With reference to Extract C and your own knowledge, discuss policies businesses **and** government might implement to reduce labour immobility to benefit the energy sector.

(15)

(a) With reference to Figure 1, explain **one** likely reason for the overall trend in the real price of gas and electricity.

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(b) With reference to Extract A, discuss the likely effectiveness of 'measures to open up and increase competition' in the UK energy market.

(12)

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P 5 2 3 1 6 A 0 2 3 4 0

(c) With reference to Extract B, assess how the regulation of energy suppliers' profits is likely to affect consumers **and** suppliers in the energy market.

(10)

P 5 2 3 1 6 A 0 2 4 4 0

The price elasticity of demand for electricity in the UK is estimated to be –0.35 in the short run and –0.85 in the long run.

(d) With reference to Extract A and your own knowledge, examine **two** possible reasons for the change in price elasticity of demand for electricity over time.

(8)

P 5 2 3 1 6 A 0 2 6 4 0

(e) With reference to Extract C and your own knowledge, discuss policies businesses **and** government might implement to reduce labour immobility to benefit the energy sector.

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(Total for Question 6 = 50 marks)

TOTAL FOR SECTION B = 50 MARKS

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SECTION C

Answer ONE question from this section.

Write your answer in the space provided.

You are advised to spend 30 minutes on this section.

EITHER

7 In September 2016 the government approved the building of an £18 billion nuclear power station, Hinkley Point C, which will supply 7% of UK electricity for up to 60 years. The power station is funded by Chinese and French investment.

Evaluate the likely private costs and external costs involved in such major power station construction projects. Use an appropriate externalities diagram in your answer.

(Total for Question 7 = 25 marks)

OR

8 In July 2016 Apple's share of the UK market for smartphones was 38%.

Evaluate whether such a high market share for one company is in the consumer interest. Use appropriate diagrammatic analysis in your answer.

(Total for Question 8 = 25 marks)

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

Chosen question number:　　　**Question 7** ⊠　　　**Question 8** ⊠

Write your answer here:

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TOTAL FOR SECTION C = 25 MARKS
TOTAL FOR PAPER = 100 MARKS

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