

Please write clearly in block capitals.

Centre number

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Candidate number

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Surname _____

Forename(s) _____

Candidate signature _____

AS ECONOMICS

Paper 1 The operation of markets and market failure

Monday 15 May 2017

Morning Time allowed: 1 hour 30 minutes

Materials

For this paper you must have:

- the insert
- a calculator.

Instructions

- Use black ink or black ball-point pen. Pencil should only be used for drawing.
- Fill in the boxes at the top of this page.
- Answer **all** questions in **Section A**.
- Answer **either** Context 1 **or** Context 2 in **Section B**.
- You will need to refer to the insert provided to answer **Section B**.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- Do all rough work in this book. Cross through any work you do not want to be marked.

Information

- There are 70 marks available on this paper.
- The marks for questions are shown in brackets.
- No deductions will be made for wrong answers.

For Examiner's Use	
Question	Mark
Section A	
Section B	
TOTAL	



Section A

Answer **all** questions in this section.

Only **one** answer per question is allowed.

For each answer completely fill in the circle alongside the appropriate answer.

CORRECT METHOD WRONG METHODS

If you want to change your answer you must cross out your original answer as shown. 

If you wish to return to an answer previously crossed out, ring the answer you now wish to select as shown. 

0 1

Demerit goods represent a type of market failure because

- A** their consumption results in positive externalities.
- B** their production results in negative production externalities.
- C** they are over-consumed in a free market.
- D** they are under-consumed when left to free market forces.

[1 mark]**0 2**

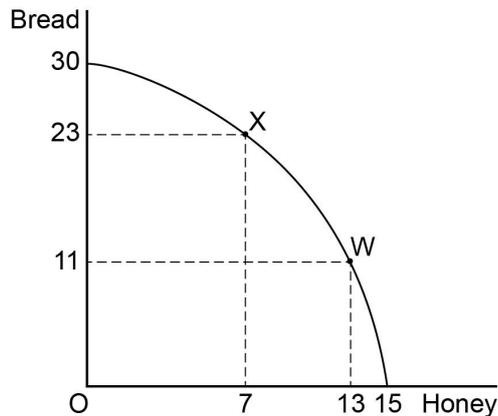
Which one of the following sets of characteristics can best be used to distinguish between different market structures?

- A** The concentration ratio and the income elasticity of demand
- B** The ease of entry to the industry and the degree of product differentiation
- C** The number of buyers in the market and the productivity of firms
- D** The scale of production in the industry and the presence or absence of externalities

[1 mark]

0 3

The following diagram shows the production possibility frontier for an economy that produces bread and honey.



If the economy is initially at point W, then the opportunity cost of moving to point X is

- A** 6 units of honey.
- B** 8 units of honey.
- C** 12 units of bread.
- D** 23 units of bread.

[1 mark]**0 4**

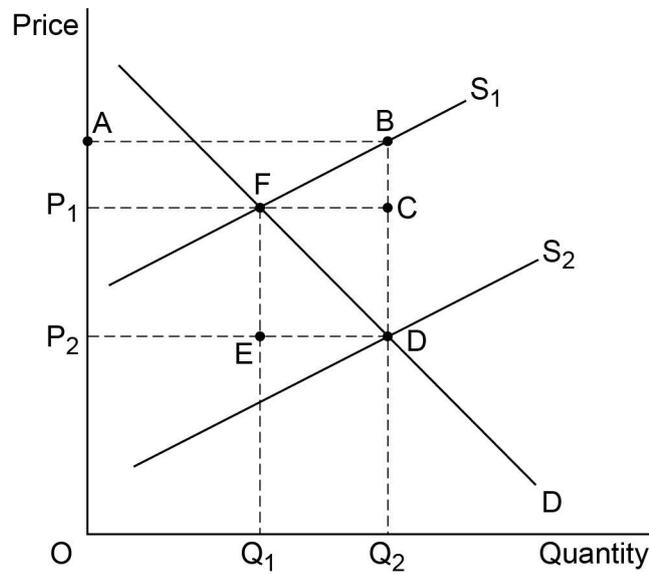
Which one of the following gives a positive value for the cross elasticity of demand?

- A** A fall in air fares increases the demand for holidays
- B** A fall in the cost of car insurance increases the demand for cars
- C** A rise in the price of petrol decreases the demand for cars
- D** A rise in rail fares increases the demand for coach travel

[1 mark]

0 5

The following diagram shows the impact of a government subsidy for recycling waste which shifts the supply curve from S_1 to S_2 .



Which one of the following areas measures the cost of the government subsidy?

A $A B C P_1$

B $A B D P_2$

C $F C D E$

D $P_1 C D P_2$

[1 mark]

0 6

An economist puts forward a hypothesis which is assessed against evidence. As a result of this, the hypothesis is accepted, rejected or modified.

This is an example of

A how normative but not positive economic statements are tested.

B how value judgements influence economic decision making.

C the methodology used to test economic theories.

D why economics is a social not a natural science.

[1 mark]



0 7

The table below shows the quantities of sandwiches that would be demanded and supplied at different prices.

Price of sandwich	Quantity demanded per day	Quantity supplied per day
£2.25	310	190
£2.50	280	280
£2.75	220	300
£3.00	180	320

Following a rise in production costs, supply falls by 80 sandwiches at all prices. The new equilibrium price would be

- A £2.25
- B £2.50
- C £2.75
- D £3.00

[1 mark]

0 8

In economics, the 'long run' refers to the time period when

- A all factors of production are fixed.
- B all factors of production may change.
- C revenue is fixed.
- D some factors of production are fixed, others may vary.

[1 mark]

Turn over for the next question



0 9

The growth of car manufacturing around Birmingham led to firms producing components for cars. As a result, car manufacturing firms experienced a fall in their average cost of production. This is an example of

- A** a financial economy of scale.
- B** a marketing economy of scale.
- C** a technical economy of scale.
- D** an external economy of scale.

[1 mark]

1 0

Claire's sweet stall in Chorley market sells sweets in 100g bags. She has the following costs of production:

Stall rental	£25 per day
Sales assistant's wages	£32 per day
Various varieties of sweets	£0.26 per 100g
Paper bags	£0.01 per bag

Assuming Claire sells 100 bags of sweets per day, what is the average cost of a bag of sweets?

- A** £0.57
- B** £0.59
- C** £0.83
- D** £0.84

[1 mark]



1 1

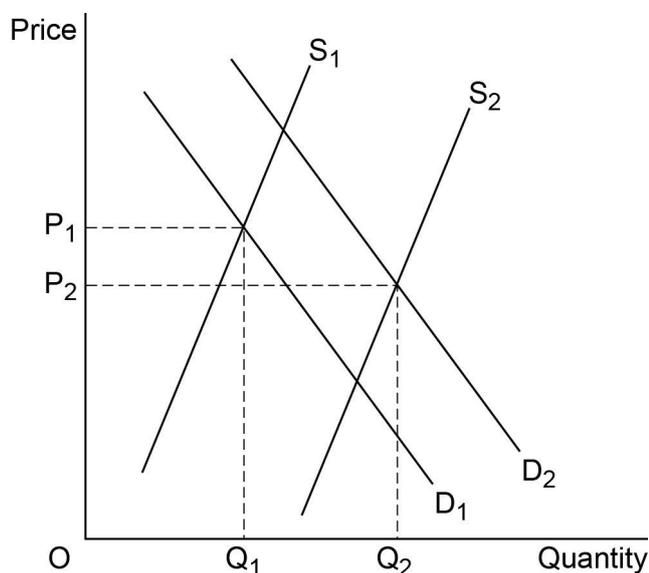
The equilibrium market price of a good increases. The establishment of the new equilibrium at a higher price would most likely result from

- A** a fall in the price of a substitute.
- B** a rise in the price of a complementary good.
- C** excess demand at the original price.
- D** new firms entering the market.

[1 mark]

1 2

The diagram below shows the demand and supply curves for new houses.



The initial demand and supply are D_1 and S_1 . Other things being equal, which one of the following combination of events is most likely to cause demand and supply to shift to D_2 and S_2 ?

- A** A fall in mortgage interest rates and a relaxation of planning restrictions
- B** A fall in the price of new homes and a fall in the productivity of construction workers
- C** A fall in the price of rented accommodation and a fall in the price of raw materials
- D** A rise in incomes and a rise in wages of construction workers

[1 mark]



1 3

A government builds a new road to reduce traffic congestion on existing roads. This project would inevitably result in government failure if

- A** local residents raised environmental objections to the new road.
- B** the cost of the new road was twice as large as the original estimate.
- C** the reduction in traffic congestion was smaller than forecast.
- D** total benefits from the new road were less than the cost of the new road.

[1 mark]**1 4**

A supermarket has estimated values of the income elasticity of demand for some of its products as shown in the table below.

Product	Income elasticity of demand
Fruit	0.30
Cheese	0.20
Milk	0.10
Eggs	0.01

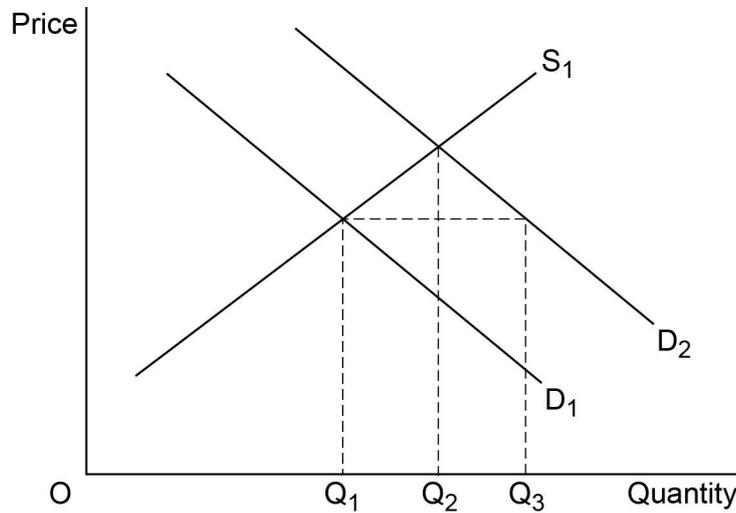
If incomes increase by 5%, for which of these grocery items will the quantity demanded increase by more than 1%?

- A** Eggs
- B** Fruit
- C** Fruit and cheese
- D** Milk and eggs

[1 mark]

1 5

In the diagram below, D_1 and S_1 are, in the absence of government intervention, the market demand and supply curves for a vaccine. The demand curve D_2 shows how much of the vaccine would have been demanded if the external benefits could have been captured by the market.



The diagram illustrates that there is a misallocation of resources because in a free market

- A** the price of the vaccine is too high.
- B** there is excess demand equal to $(Q_3 - Q_1)$.
- C** there is under-consumption of the vaccine equal to $(Q_3 - Q_1)$.
- D** there is under-production of the vaccine equal to $(Q_2 - Q_1)$.

[1 mark]**1 6**

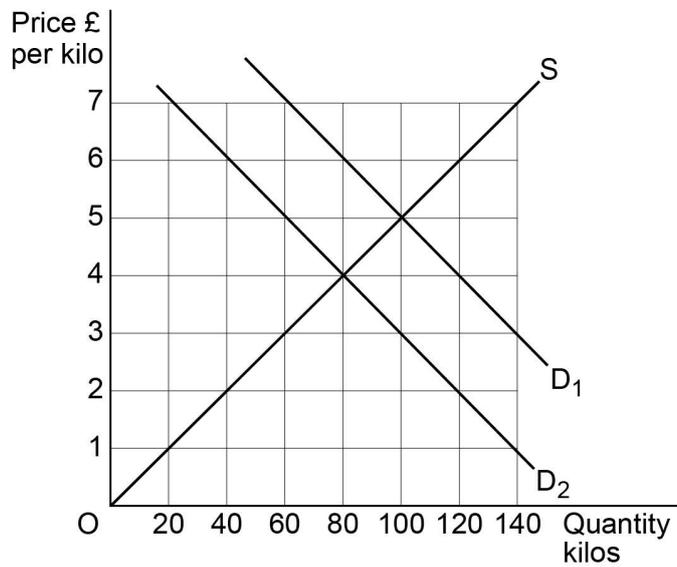
In an economy, the median total household wealth was £218 400 whilst the median total household income was £32 100. Which one of the following can be concluded from the above statement?

- A** A household with an income of £32 100 would be expected to have wealth of £218 400
- B** Exactly 50% of the population had wealth higher than £32 100
- C** The average household income was higher than the average household wealth
- D** The average household wealth was nearly seven times the average household income

[1 mark]

1 7

The diagram below shows the original market demand (D_1) and supply (S) curves for fresh strawberries. A decrease in the demand for fresh strawberries shifts the demand curve from D_1 to D_2 .



From the above diagram, it can be concluded that when the equilibrium price of fresh strawberries falls from £5 per kilo to £4 per kilo, the price elasticity of supply of strawberries is

A -0.8

B +0.8

C -1

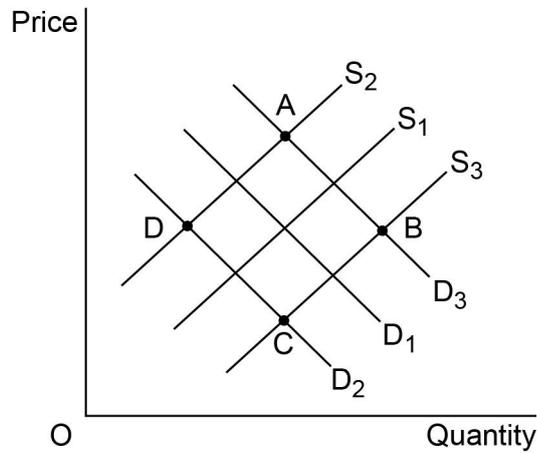
D +1

[1 mark]



1 8

The supply and demand curves for a good in a free market are S_1 and D_1 . If the good generates negative externalities in production but positive externalities in consumption, which intersection, A, B, C or D, could represent the socially optimal equilibrium?



A Intersection A

B Intersection B

C Intersection C

D Intersection D

[1 mark]

1 9

If firms in an industry increase their spending on advertising, it is likely to

A help firms to differentiate their products.

B make it easier for new firms to enter the industry.

C make the demand for the firms' products more elastic.

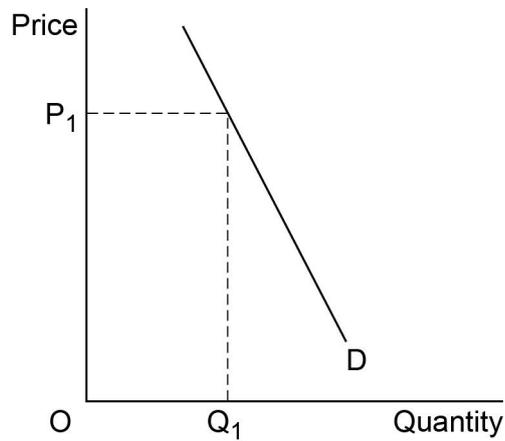
D reduce the monopoly power of the firms in the industry.

[1 mark]



2 0

The diagram below shows the market demand curve (D) for a product. The market is currently operating as a monopoly with price P_1 and output Q_1 .



If barriers to entry to the market are removed, the most likely result will be that

A firms will experience diseconomies of scale.

B the benefits from economies of scale will increase.

C the market price falls and output increases.

D the market price rises and output falls.

[1 mark]

**QUESTION 20 IS THE
LAST QUESTION IN SECTION A**



Section B

Look at the insert and choose to answer **EITHER** Context 1 **OR** Context 2.

Answer **EITHER** Questions 21 to 26 in the spaces below

OR

Questions 27 to 32 on pages 23 to 32 of this answer booklet.

There is a total of 50 marks for either Context.

Shade the circle below to indicate which context you have answered.

Context 0 1

Context 0 2

WRONG METHODS

CORRECT METHOD

EITHER

Context 1

Total for this Context: 50 marks

SUPERMARKETS

Use the source booklet provided to study **Questions 21 to 26** and **Extracts A, B and C**, and then answer the questions in the spaces which follow.

2 1

Define 'internal economies of scale' **Extract B** (line 15).

[3 marks]

Extra space _____



Turn over ►

2 2

Use **Extract B** to calculate the three firm concentration ratio for sales in the supermarket industry in December 2015.

[4 marks]

2 3

Use **Extract A** to identify **two** significant points of comparison between the changes in real income and real food prices for low-income households in the UK over the period shown.

[4 marks]

Comparison 1 _____

Extra space _____

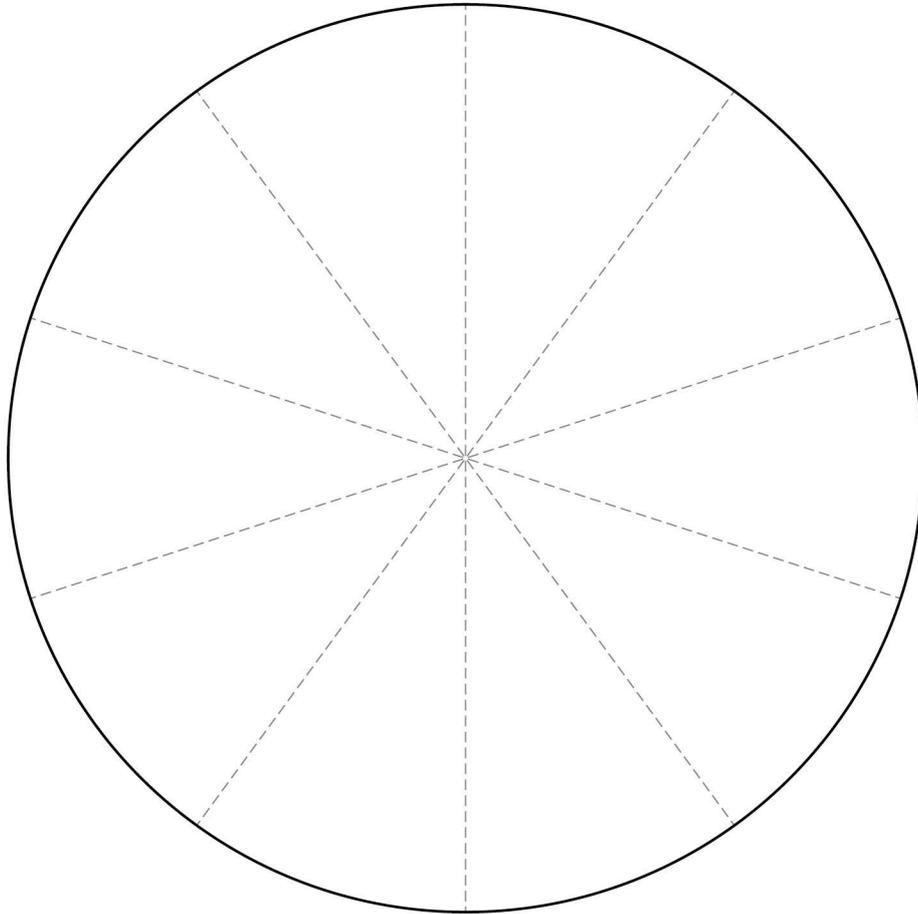
Comparison 2 _____

Extra space _____



2 4

Use the data in **Extract B** to complete the pie chart to show the market shares in the supermarket industry of each of the following in December 2015: Asda, Morrisons, Sainsbury's, Tesco and 'the rest'.

[4 marks]

As a guide, each sector of the pie chart above represents 10% of the total market share. Use of a protractor is not required.

Turn over for the next question



Do **not** answer Context 2 if you have answered Context 1.

OR

Context 2

Total for this Context: 50 marks

GAMBLING

Use the source booklet provided to study **Questions 27 to 32** and **Extracts D, E and F**, and then answer the questions in the spaces which follow.

2 7

Define 'external costs' **Extract F** (line 18).

[3 marks]

Extra space

2 8

Use **Extract E** to calculate, to **one** decimal place, the percentage change in the number of workers in the gambling sector between 2011 and 2015.

[4 marks]



Turn over ►

2 9

Use **Extract D** to identify **two** significant points of comparison between the changes in income for bingo and the National Lottery in Great Britain over the period shown.

[4 marks]

Comparison 1 _____

Extra space _____

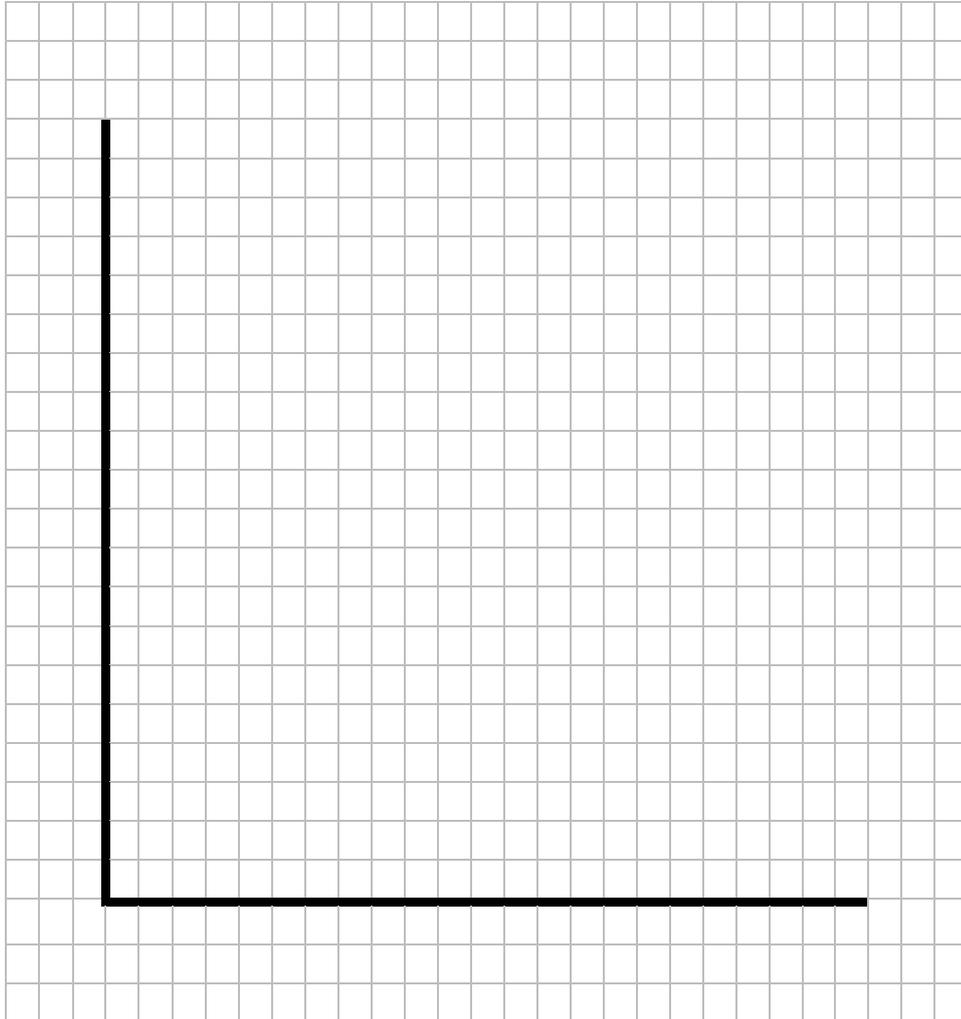
Comparison 2 _____

Extra space _____



3 0

Use the data in **Extract D** to draw a bar chart to show income from casinos for the years 2008–09, 2011–12 and 2014–15.

[4 marks]

Turn over for the next question



AS ECONOMICS

Paper 1 The operation of markets and market failure

Insert

DO NOT WRITE ANY ANSWERS IN THIS INSERT. YOU MUST ANSWER THE QUESTIONS IN THE ANSWER BOOKLET PROVIDED.

CONTEXT 1: SUPERMARKETS

Questions 21 to 26

- **Extract A:** Changes in real income and real food prices for low-income households (UK), 2002–03 to 2013–14 (2002–03 = 100)
- **Extract B:** The rise of the discount supermarkets
- **Extract C:** Effects on consumers and firms

CONTEXT 2: GAMBLING

Questions 27 to 32

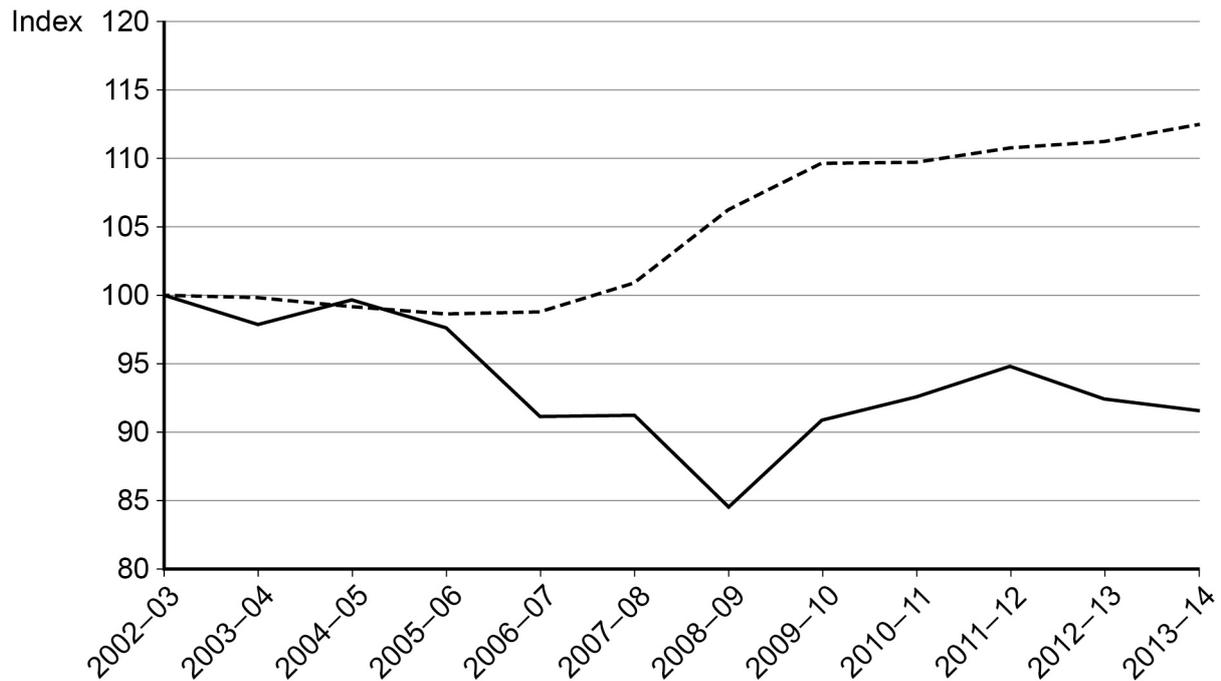
- **Extract D:** Income in the gambling industry in Great Britain, selected types, 2008–09 to 2014–15 (£million)
- **Extract E:** Gambling – problems and recent changes
- **Extract F:** Should the government do more to limit gambling?

Context 1

Total for this Context: 50 marks

SUPERMARKETS

Extract A: Changes in real income and real food prices for low-income households (UK), 2002–03 to 2013–14* (2002–03 = 100)

**Key**

- Index of income after housing costs at 2013–14 prices
- - - - Index of food prices in real terms

* The data relate to households that had less than 60% of the median income. Both sets of figures have been adjusted for inflation using a variation of the Consumer Prices Index.

Source: Department for Environment, Food and Rural Affairs, 2015

Extract B: The rise of the discount supermarkets

The last few years have seen considerable changes to the supermarket industry in the UK. Increased competition from Aldi and Lidl has weakened the monopoly power of well-established firms such as Tesco and Sainsbury's. There has also been more online ordering along with a shift away from shopping in big out-of-town stores to more frequent use of smaller local shops. 1 5

In 2014, Aldi's sales grew by 35.3%, increasing its market share to 4.6%, and by December 2015 this had increased further to 5.6%. With Lidl's 4.4%, the two firms combined now have 10% of the market, compared to 5% in 2012. This is in comparison to the 'big four' of Asda (16%), Morrisons (11%), Sainsbury's (17%) and Tesco (28%). Some have fared better than others, with Sainsbury's overtaking Asda in 2015 and Waitrose, who pride themselves on quality and service, also increasing their sales. 10

So what is driving these changes? Real incomes have fallen, causing many consumers to look for cheaper, and possibly less healthy, products in the 'budget supermarkets' and 'pound shops'. In these difficult times, Aldi and Lidl have been able to exploit considerable internal economies of scale, and by offering low-priced goods they have been able to attract customers from a variety of social backgrounds. 15

As with other products, people are increasingly ordering online. Aldi has recently announced plans for a limited online service starting in February 2016, and Lidl are also trying to gain access to this market. This will further increase competition, forcing the more established firms to look at ways to improve their service. 20

Source: News reports, January 2016

Extract C: Effects on consumers and firms

Consumers now have much more choice of supermarket retailers and types of shop. Value for money has become increasingly important and supermarkets have been forced to cut prices and offer other incentives to keep and attract customers. 1

To keep food prices low, there have been claims that supermarkets are using their power to drive down what they are paying farmers, although in August 2015, four of the supermarkets agreed to set a higher minimum price for milk they buy. Earlier in the year, an investigation was launched after firms supplying apples were accused of paying migrant workers low wages and housing them in poor conditions. There was also evidence of supermarkets misleading customers with their price deals. 5

For some time, the big supermarket chains have been buying land to potentially build more large out-of-town stores but partly to reduce the availability of key sites to their rivals. As people have changed their shopping habits, and with the 'big four' making less profit, less of this land seems likely to be used for future supermarkets, although this situation could change. According to a leading property agent, the empty land could be enough to build 13 500 family homes, which, given the rising number of households, are urgently needed. 10 15

So, on balance, have the changes in the supermarket industry been for the better, and if so, for whom?

Source: News reports, January 2016

Turn over for Context 1 questions

Turn over ►

Context 1 – Questions 21 to 26

- 2 1** Define 'internal economies of scale' **Extract B** (line 15). **[3 marks]**
- 2 2** Use **Extract B** to calculate the three firm concentration ratio for sales in the supermarket industry in December 2015. **[4 marks]**
- 2 3** Use **Extract A** to identify **two** significant points of comparison between the changes in real income and real food prices for low-income households in the UK over the period shown. **[4 marks]**
- 2 4** Use the data in **Extract B** to complete the pie chart to show the market shares in the supermarket industry of each of the following in December 2015: Asda, Morrisons, Sainsbury's, Tesco and 'the rest'. **[4 marks]**
- 2 5** **Extract B** (lines 2–3) refers to 'the monopoly power of well-established firms' in the supermarket industry.
- Explain **two** factors that could influence the monopoly power of firms in the supermarket industry. **[10 marks]**
- 2 6** **Extract C** (lines 16–17) states 'have the changes in the supermarket industry been for the better, and if so, for whom?'
- Use the extracts and your knowledge of economics to assess whether the changes in the supermarket industry are likely to be better or worse for consumers **and** firms. **[25 marks]**

There are no questions printed on this page

Turn over for Context 2

Turn over ►

Context 2

Total for this Context: 50 marks

GAMBLING

Extract D: Income in the gambling industry in Great Britain, selected types, 2008–09 to 2014–15* (£million)

	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
Bingo	703	627	626	681	701	672	662
Casinos	796	751	797	873	961	1111	1161
National Lottery	2522	2679	2840	3124	3280	3100	3232

*The data relate to 'gross gambling yield'. This consists of bets and other income from gambling minus payment of winnings but not deducting other costs for the year April to March.

Source: Gambling Commission, 2015

Extract E: Gambling – problems and recent changes

According to the Gambling Commission, in 2007, before the recession, 68% of adults gambled, but by 2010, this had risen to 73%. As real incomes have fallen, some people have gambled more, but although gambling distracts people from their problems, it can become an addiction, affecting both gamblers and their families. Gamblers are more likely to suffer certain health problems and they are more likely to go to prison, often for theft. Many gambling addicts are also addicted to alcohol. 1
5

The most common form of gambling is the National Lottery. People may be attracted by the 'chance of winning big money' or because 'it's fun'. However, now that the numbers in the main lottery draw have increased to 59, the chance of winning the top prize has fallen to 1 in 45 million. The betting firm, William Hill, said that there were similar odds of the Duke and Duchess of Cambridge having 11 children all of whom would win Olympic medals. Despite this, in January 2016, sales surged when the top prize reached £66m. With imperfect information, many people either do not know or do not understand that the chance of winning is so low. 10

Technological changes, together with advertising, have also had quite an impact in changing tastes. Online gambling has increased considerably, up by 12.5% in 2010 alone. This is due to more online casinos and bingo sites, faster internet speeds and more people using their phones to gamble. Meanwhile, although the number of workers in the gambling sector has fallen from 115 564 in 2011 to 104 869 in 2015, it remains a significant employer. 15

Source: News reports, February 2016

Extract F: Should the government do more to limit gambling?

The minimum age for most gambling activities is 18 but at 16 you can buy a lottery ticket. How well are age restrictions enforced? In 2013, it was reported that six times as many children tried to enter betting shops than in 2009. 1

There has been more crime in betting shops in recent years, as some addicted gamblers have become violent. The police were called over 9000 times in 2014, up from 1600 the previous year. For example, after losing £5000 in an afternoon, one gambler in the Midlands used his last £5 to buy a hammer to vandalise the gambling machines. The issue of whether more should be done has divided Members of Parliament: some wanted to reduce the maximum bet on gambling machines from £100 to £2, but there was also pressure from the gambling industry, resulting in no change. 5 10

Some years ago, David Cameron, the Prime Minister, said: “Open markets and free enterprise are the best way to increase wealth, health and happiness ... But we must also stand up to business when the things that people value are at risk ... it’s time to place the market within a moral framework”.

So what about gambling? Are people’s views about alternative options influenced enough by moral judgements? Is there a place for this market ‘within a moral framework’? If so, should there be more regulations or taxes to try to reduce the effects of gambling, in terms of both its private and external costs? Is the gambling industry taking advantage of the poor? Or is it just harmless fun that increases our ‘happiness’, and should be left to the free market? 15 20

Source: News reports, February 2016

Turn over for Context 2 questions

Turn over ►

Context 2 – Questions 27 to 32

- 2 7** Define 'external costs' **Extract F** (line 18). **[3 marks]**
- 2 8** Use **Extract E** to calculate, to **one** decimal place, the percentage change in the number of workers in the gambling sector between 2011 and 2015. **[4 marks]**
- 2 9** Use **Extract D** to identify **two** significant points of comparison between the changes in income for bingo and the National Lottery in Great Britain over the period shown. **[4 marks]**
- 3 0** Use the data in **Extract D** to draw a bar chart to show income from casinos for the years 2008–09, 2011–12 and 2014–15. **[4 marks]**
- 3 1** **Extract E** (lines 1–2) states 'in 2007, before the recession, 68% of adults gambled, but by 2010, this had risen to 73%.'
Explain **two** factors that could have increased the percentage of adults who gamble. **[10 marks]**
- 3 2** **Extract F** (lines 17–18) states 'should there be more regulations or taxes to try to reduce the effects of gambling, in terms of both its private and external costs?'
Use the extracts and your knowledge of economics to assess whether the UK government should intervene more in the gambling industry. **[25 marks]**

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