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.
The table shows market data for e-cigarette kits. The original equilibrium price is £23.

<table>
<thead>
<tr>
<th>Price (£)</th>
<th>Quantity demanded per month (000)</th>
<th>Quantity supplied per month (000)</th>
<th>New quantity demanded per month (000)</th>
<th>New quantity supplied per month (000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>5</td>
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</table>
As a result of a successful advertising campaign, demand increased by 3000 e-cigarette kits at all prices. At the same time production costs fell leading to an increase in supply of 1000 e-cigarette kits at all prices.

(a) Calculate the new equilibrium price and quantity following the successful advertising campaign and the fall in production costs. Use the last two columns for your working.

(b) Research conducted in New Zealand in 2014 estimated the cross elasticity of demand for e-cigarettes to be 0.16 in response to changes in the price of tobacco. This implies that a 5% increase in the price of tobacco will cause the percentage change in demand for e-cigarettes to be:

- A -31.25
- B -0.16
- C 0.8
- D 31.25

(Total for Question 1 = 5 marks)
Between 2010 and 2015 the average price of tea in the UK increased from £7.20 per kilo to £8.48 per kilo. Over the same period the quantity of tea purchased fell from 97 million kilos to 76 million kilos.


(a) Assume that the change in the quantity of tea purchased was only caused by the change in the price of tea. Calculate the price elasticity of demand for tea in response to the rise in its price. You are advised to show your working.

(b) Calculate the change in total sales revenue for UK tea retailers between 2010 and 2015. You are advised to show your working.
(c) Estimates for the demand for black tea in the UK suggest that it is an inferior good. This implies it has a negative:

☐ A cross elasticity of demand
☐ B income elasticity of demand
☐ C price elasticity of demand
☐ D price elasticity of supply

(Total for Question 2 = 5 marks)
The Indian government has introduced a subsidy on domestic cooking gas cylinders in the city of Mumbai. The diagram below shows the effect following the introduction of the subsidy.

Price per cylinder (Rupees)

1023

526

455

D

S

S1

0 1.5 1.8 Quantity of gas cylinders, daily (million)


(a) Calculate the total domestic cooking gas subsidy paid daily by the Indian government. You are advised to show your working.

(2)
(b) Calculate the percentage share of the total subsidy received by:

(i) consumers

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(ii) producers

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(c) One effect of the subsidy is to increase:

- A  consumer surplus
- B  market failure
- C  public good provision
- D  tax revenue

(Total for Question 3 = 5 marks)
In 2015 JCB, the construction equipment manufacturer, experienced a 6% fall in revenue. This resulted from a reduction in sales of construction equipment to emerging markets.

(a) Draw a cost and revenue diagram to show the likely impact of a reduction in sales of construction equipment on JCB's profits.

(b) In India JCB has a strong brand image and a 50% share of the market for construction equipment. This means the construction equipment market in India is likely to have a low level of:

- □ A concentration
- □ B contestability
- □ C private ownership
- □ D specialisation

(Total for Question 4 = 5 marks)
Figure 1 shows the distribution of the revenue received from the sale of a Starbucks cappuccino drink priced at £2.27 in 2015.

(Source: adapted from Allegra strategies research and analysis, reported in The Times, 27th January 2015)

(a) Which one of the following is a fixed cost to Starbucks?

(1) 
- [ ] A Coffee
- [ ] B Milk
- [ ] C Packaging
- [ ] D Rent

(b) Explain the difference between fixed costs and variable costs.

(2) 

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(c) With reference to Figure 1, calculate the profit (in pence) for a cappuccino drink. You are advised to show your working.

(2)

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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.
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

Supermarket price war, food waste and possible mergers

Figure 1: Market shares by total revenue in the UK supermarket sector, 2010 and 2015

Figure 2: Proportion of food suppliers reporting that the following supermarkets fail to meet the Groceries Code of Conduct, 2015.

*(Source: YouGov poll of more than 1100 food suppliers to supermarkets. Reported in The Times, 23 June 2015)*

Extract A

**Supermarket price war puts pressure on their food suppliers**

The number of food suppliers (to supermarkets) struggling to remain in business has increased by more than 50% over the past year as supermarkets engage in an intense price war. It has never been tougher for the UK’s food suppliers according to a study by accountants Begbies Traynor. It blames aggressive price-cutting by the supermarkets and delays in payments to food suppliers as the main causes of the difficulties. Further problems include food suppliers being forced to pay excessive amounts for packaging specified by supermarkets and funding in-store promotions. Almost 90% of struggling food suppliers are small and medium-sized businesses.

The price war has contributed to food prices paid by consumers falling by 1.7% over the past two years.

The market shares of the big four supermarkets – Tesco, Asda, Sainsbury’s and Morrisons – are under pressure as shopping habits change. Many consumers are switching from one main weekly shop to shopping more frequently at local discount stores such as Aldi and Lidl or purchasing goods online from other grocery retailers.

The big four supermarkets have responded by putting more pressure on their suppliers despite an investigation by the Groceries Code Adjudicator (GCA). The GCA has the power to fine supermarkets up to 1% of their annual sales revenue if they break the Groceries Code of Conduct. A YouGov study found considerable differences between the supermarkets in meeting the Code with Aldi performing well but Tesco badly. Despite the Groceries Code, many food suppliers are reluctant to complain for fear of losing contracts with the supermarkets.

Extract B

Food waste in the supply chain

A report from the British Retail Consortium reveals that supermarkets are directly responsible for around 0.2 million tonnes of food waste every year. This is due to the expiry of use-by-dates and poor handling of stock.

However, 4.1 million tonnes of food waste occurs annually in the food supply chain before it even reaches the supermarkets, indicating the existence of information gaps. The supermarkets are cooperating with food suppliers and farmers to try to reduce this waste. This involves improving forecasts for supply and demand of food and increasing the reliability of transportation and storage.

Consumers, the final stage of the supply chain, waste a further 7 million tonnes of food each year. This suggests irrational behaviour. Supermarkets are also working with consumers to reduce the waste by providing advice on how to store and use leftover food. The development of packaging designs to keep food fresher for longer is one of the innovations under way to reduce waste.


Extract C

Proposed merger activity in the supermarket sector

Analysts at Société Générale, an investment bank, have recommended a merger between Sainsbury’s and Morrisons. They claim it would lead to increased economies of scale and market power for the combined business. Such a merger between the third and fourth largest supermarkets in Britain would have been unrealistic a few years ago due to concerns of its impact in reducing competition. However, the chances of getting permission from the Competition and Markets Authority have increased following the growth of Aldi and Lidl. Giant mergers have been approved in other sectors such as Lloyds-HBOS (banking) and British Telecom-EE (telecommunications).

The suggested merger would have its challenges. There is considerable overlap between the locations of the stores and the enlarged company would require the rationalisation and co-ordination of hundreds of thousands of employees. A new expensive IT system is likely to be required and the underlying difficult market trends would remain in the food retailing industry.

6 (a) With reference to Figure 1 and Extract A, explain **one** likely reason for the change in the four-firm concentration ratio of the supermarket sector between 2010 and 2015. (5)

(b) With reference to Figure 2 and Extract A, discuss the possible impact of supermarket monopsony power on both food suppliers and consumers. (12)

(c) Examine measures the government might use to restrict the monopsony power of supermarkets. (8)

(d) Assess the extent to which ‘information gaps’ (Extract B, lines 5 and 6) and ‘irrational behaviour’ (Extract B, line 11) are the main causes of food waste in the UK. (10)

(e) Discuss the likely problems for Sainsbury’s and Morrisons if the suggested merger between them goes ahead. Refer to Figure 1, Extract C and your own knowledge in your answer. (15)
(a) With reference to Figure 1 and Extract A, explain one likely reason for the change in the four-firm concentration ratio of the supermarket sector between 2010 and 2015.
(b) With reference to Figure 2 and Extract A, discuss the possible impact of supermarket monopsony power on both food suppliers and consumers.

(12)
(c) Examine measures the government might use to restrict the monopsony power of supermarkets.

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(8)
(d) Assess the extent to which ‘information gaps’ (Extract B, lines 5 and 6) and ‘irrational behaviour’ (Extract B, line 11) are the main causes of food waste in the UK.

(10)
(e) Discuss the likely problems for Sainsbury’s and Morrisons if the suggested merger between them goes ahead. Refer to Figure 1, Extract C and your own knowledge in your answer.
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 2015 a report by Public Health England recommended the imposition of a 20% tax on the sale of soft drinks that contain high levels of sugar.

Evaluate the likely microeconomic effects of such a tax.

(Total for Question 7 = 25 marks)

OR

8  ‘Revenue maximisation is a more realistic business objective than profit maximisation for many businesses.’

To what extent do you agree with this statement? Refer to an industry of your choice in your answer.

(Total for Question 8 = 25 marks)