Economics Questions By Topic:

Revenue, Costs & Profits (3.3)

A-Level Edexcel Theme 3

0207 060 4494
www.expert-tuition.co.uk
online.expert-tuition.co.uk
enquiries@expert-tuition.co.uk
The Foundry, 77 Fulham Palace Road, W6 8JA

Table Of Contents

SECTION A

Write your answers in the spaces provided.

1 Patrick Street Productions produces musicals. Its latest production is 'It's a Wonderful Life' and the total cost of this production is $200 000. The ticket price is $40. The theatre has a capacity of 300 seats. The company aims for revenue maximisation. If this is achieved, revenue from ticket sales will cover 30% of total costs. Charitable donations contribute 12.5% towards total cost and a government subsidy ensures the production covers all of its costs.

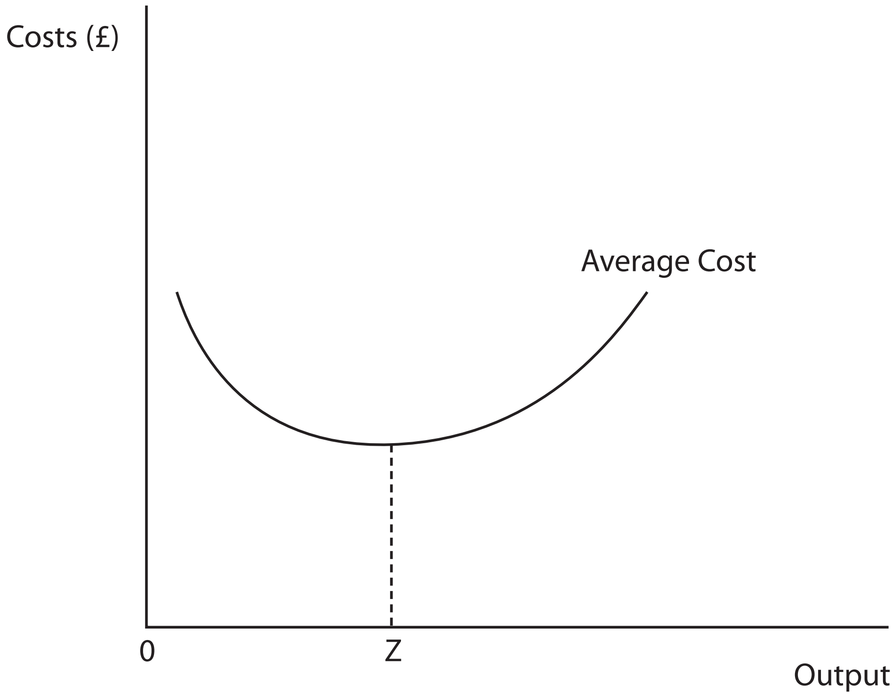
(Source adapted from: https://www.cbc.ca/news/canada/british-columbia/a-bit-of-a-desperate-time-as-costs-rise-professional-theatre-companies-survive-rather-than-thrive-1.5489733)

Calculate the total revenue from ticket sales for 'It's a Wonderful Life', assuming it is shown only five times, all at full capacity. You are advised to show your working.

(2)

(Total for Question 1 = 2 marks)

2 The following illustrates the daily average cost curve for a doughnut producer:



(a) Explain what happens to total cost at output levels greater than Z.

(2)

....

....

....

....

....

....

(b) At output levels greater than Z, which **one** of the following correctly identifies what will happen to the cost?

(1)

		Average fixed cost	Average variable cost	Marginal cost
☒	**A**	Falls	Falls	Rises
☒	**B**	Falls	Rises	Rises
☒	**C**	Rises	Rises	Falls
☒	**D**	Rises	Rises	Rises

(c) For a luxury doughnut producer the average selling price is £2. The average variable cost is 40% of the selling price and its fixed cost per day is £300. Calculate total costs per day assuming it produces 400 doughnuts per day.

(2)

(Total for Question 2 = 5 marks)

3 In 2016, the insurance group Esure undertook a demerger with its GoCompare price comparison website.

Following the demerger, GoCompare announced in 2017 a profit of £17.5 million, up 21.5% on 2016. Total revenue in 2017 was £75.8 million, up 4.1% on 2016.

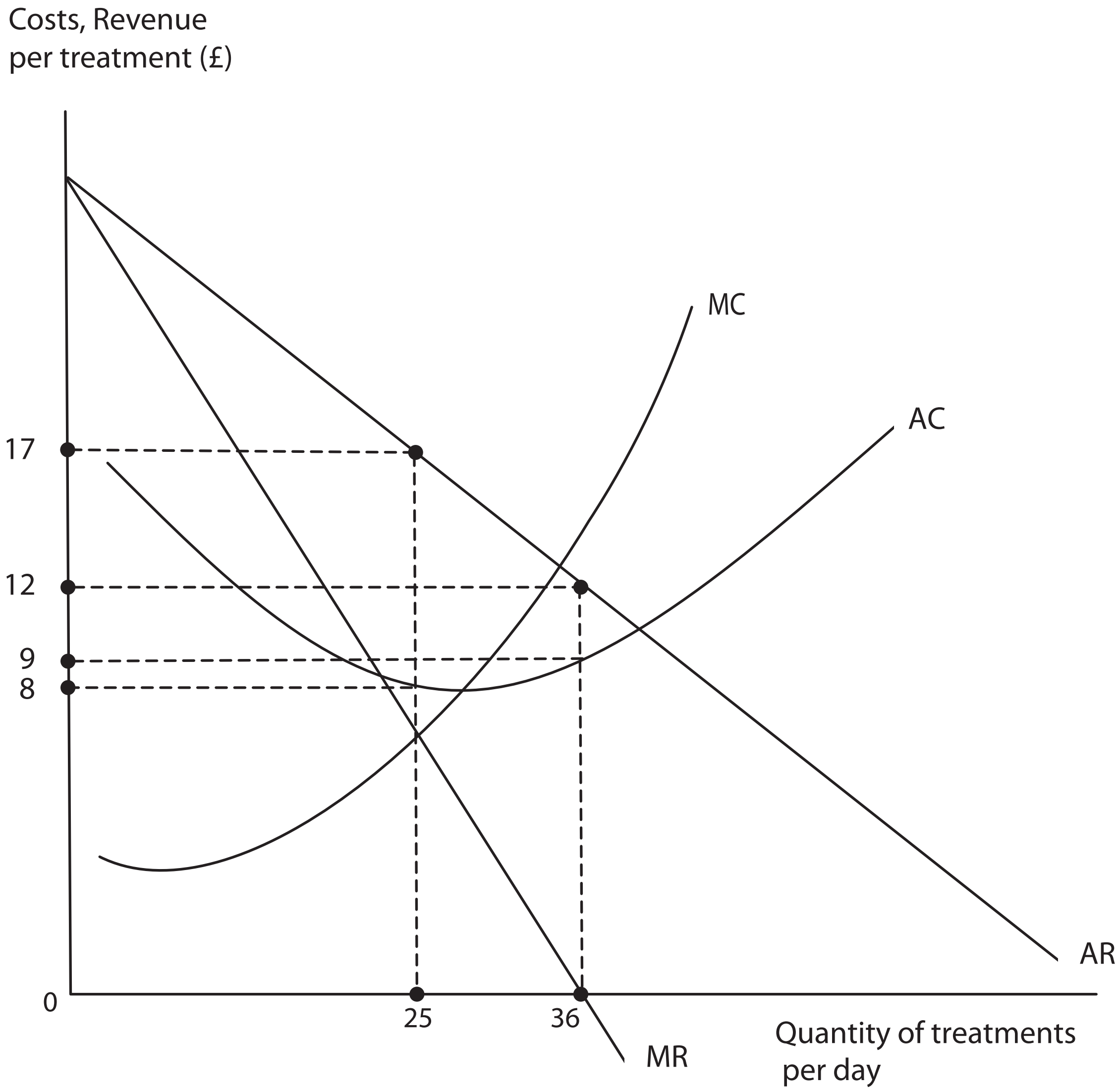
(Source: adapted from https://www.insuranceage.co.uk/insurer/3107496/profits-up-at-go-compare)

Calculate, using the information provided, the total costs of GoCompare in **2016**.

(4)

(Total for Question 3 = 4 marks)

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.



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.

(4)

....

....

....

....

....

....

(Total for Question 4 = 4 marks)

5 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.

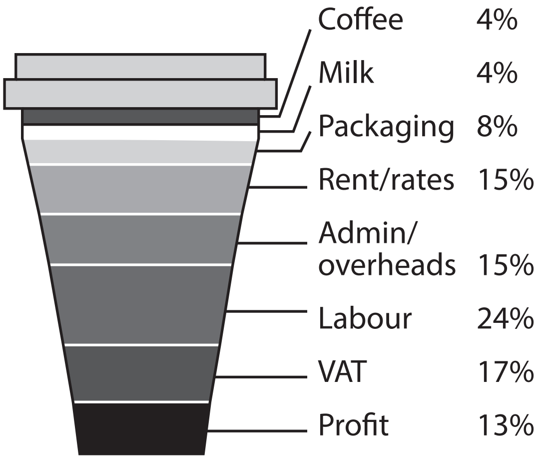
Draw a cost and revenue diagram to show the likely impact of a reduction in sales of construction equipment on JCB's profits.

(4)

(Total for Question 5 = 4 marks)

6 Figure 1 shows the distribution of the revenue received from the sale of a Starbucks cappuccino drink priced at £2.27 in 2015.

Figure 1



(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)

....

....

....

....

....

....

....

....

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

(2)

(Total for Question 6 = 5 marks)

7 Blackberry made a loss of $4.4 billion in quarter 3, 2013 but continued to operate.

Explain **one** condition under which loss-making firms might continue to operate in the short-run.

(4)

(Total for Question 7 = 4 marks)

8 Assume a firm is operating under conditions of perfect competition. The market price is above the firm's average cost. Which of the following are the most likely long run consequences for this firm?

(1)

A Its price will fall and it will increase output

B Its price will fall and it will decrease output

C Its price will rise and it will increase output

D It will keep its price and output unchanged

E It will shut down and exit the industry

Answer ☐

Explanation

(3)

(Total for Question 8 = 4 marks)

9 In 2016, Tata Steel reported that it made losses of £1 million a day from its UK operations. Under which one of the following conditions is a firm with short-term losses most likely to shut down operations?

(1)

A It is not covering average fixed costs in the short run

B It is not covering average variable costs in the short run

C It is experiencing diseconomies of scale

D It is not covering marginal costs in the short run

E There are low sunk costs in the industry

Answer

Explanation

(3)

(Total for Question 9 = 4 marks)

10 Commodities such as oil, copper and iron ore have fallen significantly in price since 2011. These commodities are major costs for manufacturing firms such as BAE (aerospace) and BMW Mini (cars). The most likely consequences for these firms of lower commodity prices are:

(1)

	Output	**Profits**
A	Rise	Rise
B	Constant	Constant
C	Fall	Fall
D	Constant	Fall
E	Fall	Constant

Answer ☐

Explanation

(3)

....

....

....

....

....

....

....

....

....

....

....

....

....

....

(Total for Question 10 = 4 marks)

11 A firm which prints greetings cards records its short run costs. It observes that the average cost per card decreases as more are produced, although the marginal cost is rising. It follows that

(1)

A there are economies of scale

B the law of diminishing returns has not yet set in

C the fixed costs are zero

D marginal costs rise whenever average costs fall

E marginal costs are below average costs

Answer ☐

Explanation

(3)

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

(Total for Question 11 = 4 marks)

12 The following table shows the number of new technology 'Tech Companies' based at East End Tech City, a technology cluster located in East London.

Year	Number of Tech Companies
2009	15
2010	85
2011	200
2012	5 000
2013	15 600

(Source: UHY Hacker Young, http://www.uhy-uk.com/news-events/news/londons-silicon-roundabout-remains-top-area-uk-start-ups/)

The data suggest that Tech Companies in East London are experiencing

(1)

A external economies of scale

B high commercial barriers to entry

C financial diseconomies of scale

D diminishing marginal returns

E an increasing level of merger activity

Answer

Explanation

(3)

(Total for Question 12 = 4 marks)

13 The table below gives the 4-firm concentration ratio in a selection of industrial sectors in the USA.

Sector	**4-firm concentration ratio**
Food manufacturing	16.8
Metal household furniture manufacturing	27.6
Motor vehicle manufacturing	81.2
Breakfast cereal manufacturing	82.1
Malt manufacturing	91.4
Guided missile and space vehicle manufacturing	95.3

(Source: US census www.census.gov/prod/ec02/ec0231sr1.pdf)

What can be inferred from this information?

(1)

A The metal household furniture sector is more concentrated than the breakfast cereal sector

B There are no barriers to entry in food manufacturing

C There are external diseconomies of scale in motor vehicle manufacturing

D Four firms have significant market power in the manufacture of motor vehicles

E The guided missile and space vehicle sector is monopolistically competitive

Answer ☐

Explanation

(3)

....

....

....

....

....

....

....

....

....

....

(Total for Question 13 = 4 marks)

14 Lufthansa, a German airline, owned British Midlands International (BMI), a loss-making airline. Lufthansa announced plans to sell BMI in November 2011. Which one of the following is the most likely reason for this sale?

(1)

A The BMI part of the business was facing increasing marginal returns

B BMI was experiencing falling marginal costs

C To benefit from conglomerate integration

D To increase market concentration

E To reduce diseconomies of scale

Answer

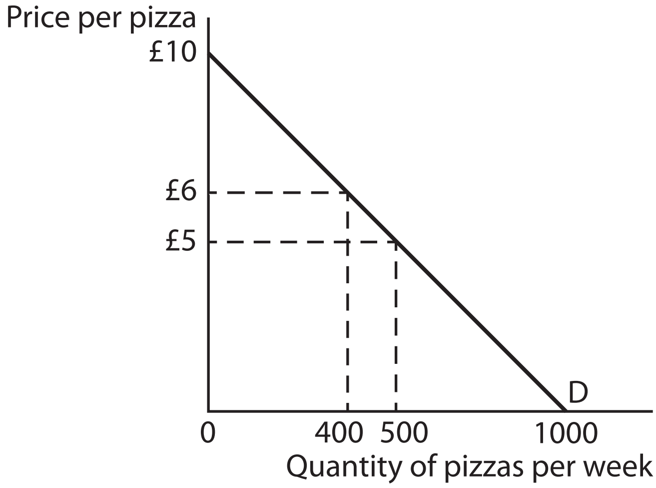
Explanation

(3)

(Total for Question 14 = 4 marks)

15 A pizza restaurant faces the following demand curve (D). Which one of the following is necessarily true?

(1)



A Marginal revenue will be positive then negative as price falls

B Revenue maximisation occurs at a price of £6

C Sales are maximised at a price of £6

D Average revenue will equal zero where price elasticity of demand is unitary

E Cutting the price from £6 to £5 will increase profits

Answer

Explanation

(3)

....

....

....

....

....

....

....

....

....

....

(Total for Question 15 = 4 marks)

16 A sports equipment chain of shops faces a downward sloping demand curve and is making supernormal profits. The impact of a significant rise in the **rent** for the shops is likely to lead to

(1)

	Price	Profit
A	No change	No change
B	Rise	No change
C	Rise	Fall
D	Fall	Fall
E	No change	Fall

Answer ☐

Explanation

(3)

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

(Total for Question 16 = 4 marks)

17 In October 2011 Boeing's 787 Dreamliner aircraft entered commercial operation. The firm announced that its fixed costs of development had been much higher than expected. Assuming the firm is profit maximising, what impact is an increase in fixed costs likely to have on output, price and profit?

(1)

	Output	**Price**	**Profit**
A	No change	No change	No change
B	No change	No change	Fall
C	No change	Rise	No change
D	Fall	Rise	No change
E	Fall	Rise	Fall

Answer

Explanation

(3)

....

....

....

....

....

....

....

....

....

....

....

....

....

....

(Total for Question 17 = 4 marks)

18 A firm cuts the price of its product. As a result, total revenue falls and marginal cost rises. Over this range of output, it can be inferred that

(1)

A the price elasticity of demand is relatively elastic and there are diseconomies of scale

B the price elasticity of demand is relatively inelastic and there are diminishing returns to a variable factor of production

C the price elasticity of demand is unitary and there are diseconomies of scale

D the firm's marginal profit would increase

E the firm is making a loss

Answer ☐

Explanation

(3)

....

....

....

....

....

....

....

....

....

....

....

....

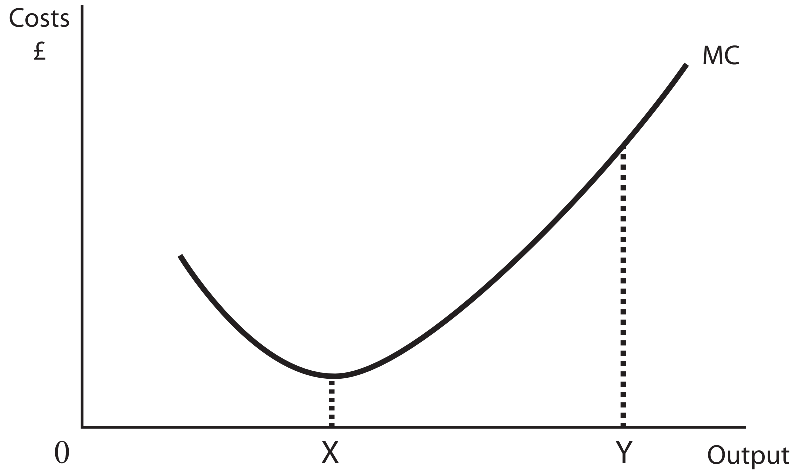
....

....

(Total for Question 18 = 4 marks)

19 Which of the following best explains the shape of the short run marginal cost curve between X and Y?

(1)



A The law of diminishing marginal returns

B The law of increasing marginal product

C Average costs are rising

D Average variable costs are rising

E Economies of scale

Answer

Explanation

(3)

(Total for Question 19= 4 marks)

EXPERT TUITION

20 General Motors made a loss of $4.3billion in 2009. Under which one of the following conditions are firms such as this likely to keep operating?

(1)

A The market is highly contestable

B They are covering average variable costs in the short run

C Total revenue is less than total cost in the long run

D They are covering marginal costs in the short run

E There are low sunk costs in the industry

Answer ☐

Explanation

(3)

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

(Total for Question 20 = 4 marks)

21 The price of cotton, a major cost component in the clothing sold by retailers Next, Primark and Debenhams, is predicted to rise significantly. What will be the effect on these firms, if other factors remain constant?

(1)

	Output	Profits
A	Rise	Rise
B	Constant	Constant
C	Fall	Fall
D	Constant	Fall
E	Fall	Constant

Answer ☐

Explanation

(3)

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

(Total for Question 21 = 4 marks)

22 A large number of small bakeries in a competitive industry are taken over and combined to form a single monopoly supplier. Assuming **constant average costs**, what effect will this have on price and output?

(1)

	Price	Output
A	fall	fall
B	no change	no change
C	rise	rise
D	no change	fall
E	rise	fall

Answer

Explanation

(3)

(Total for Question 22 = 4 marks)

23 If a firm's fixed costs increase by 20 per cent, marginal costs will increase by:

(1)

A zero

B 10%

C 20%

D 100%

E 200%.

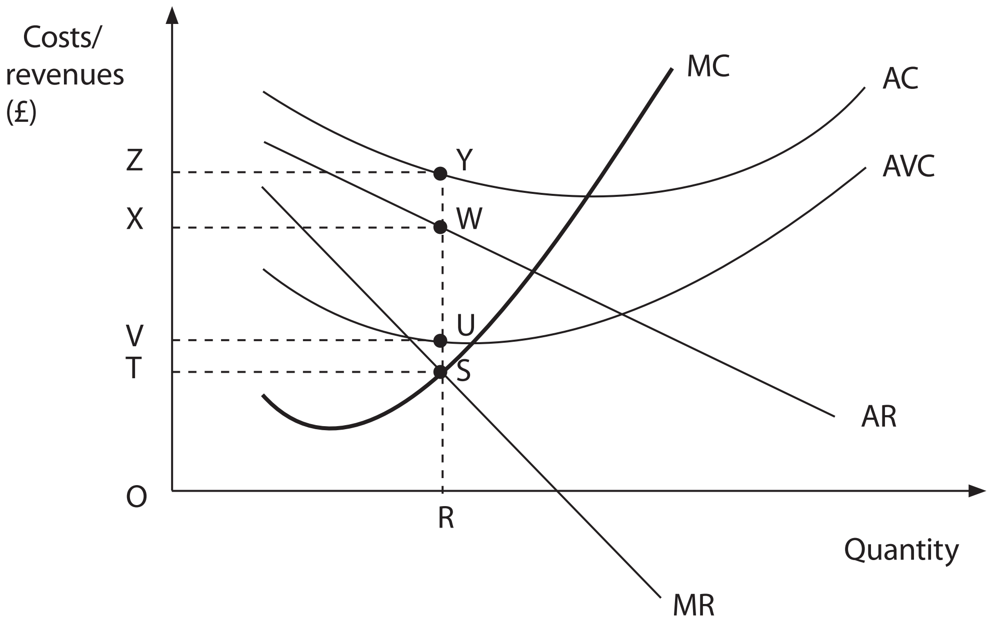
Answer

Explanation

(3)

(Total for Question 23 = 4 marks)

24



The diagram shows the costs and revenues for a profit maximising firm in a market. The most likely outcome for the firm, assuming no change in costs or demand, is to

(1)

A continue in business and make supernormal profit ZYWX

B continue in business and raise the price

C continue in business and cut the price

D continue in business in the short run but shut down in the long run

E shut down immediately.

Answer ☐

Explanation

(3)

....

....

....

....

....

....

....

(Total for Question 24 = 4 marks)

25 In December 2009 the Royal Mail announced that it had made a 4% increase in profits compared to 2008, despite a fall of 3 million items a day in the amount of post being sent. The most likely reason for the increase in profits was

(1)

A an increase in contestability in the postal market

B a fall in the real price of postage stamps

C a rise in nominal wages of postal workers

D a fall in employment in the Royal Mail

E external diseconomies of scale in the postal industry.

Answer ☐

Explanation

(3)

....

....

....

....

....

....

....

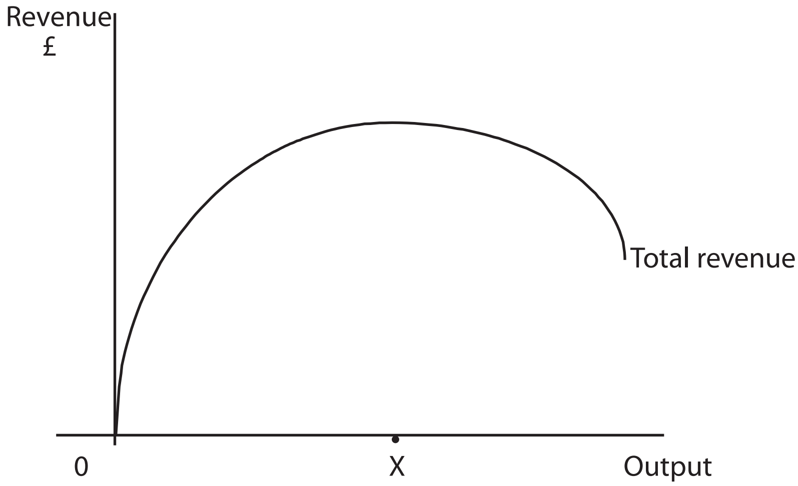
....

....

....

(Total for Question 25 = 4 marks)

26



The diagram shows the total revenue curve of a firm. It can be deduced that:

(1)

A average revenue and marginal revenue will be upward sloping as output increases

B average revenue will be equal to marginal revenue as output increases

C average cost will be falling as output increases

D the firm will be making maximum profit at output 0X

E average revenue and marginal revenue will both be falling as output increases.

Answer

Explanation

(3)

....

....

....

....

....

....

....

....

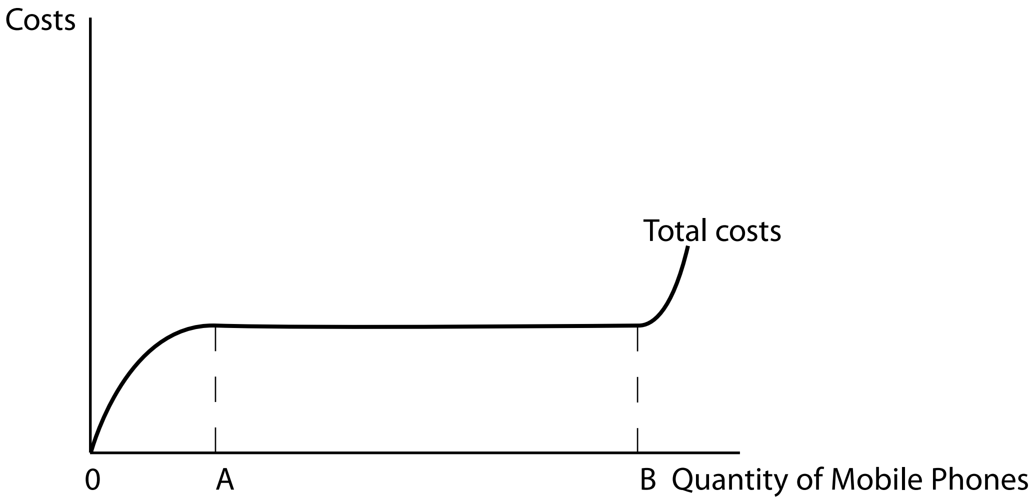
....

....

(Total for Question 26 = 4 marks)

27 A mobile phone company finds that its total costs are best illustrated by the following curve. What can be deduced about costs over the usual range of output AB?

(1)



A Total costs are rising

B Marginal costs are zero

C Average costs are constant

D Average costs are rising

E Marginal costs are rising.

Answer

Explanation

(3)

....

....

....

....

....

....

....

....

....

....

(Total for Question 27 = 4 marks)

28 A profit maximising monopolist facing constant average costs experiences a decrease in demand. Other things being equal, which of the following is likely to happen?

(1)

	Output	**Price**	**Profit**
A	Stays constant	Falls	Falls
B	Rises	Rises	Stays constant
C	Stays constant	Rises	Falls
D	Falls	Rises	Falls
E	Falls	Falls	Falls

Answer ☐

Explanation

(3)

....

....

....

....

....

....

....

....

....

....

(Total for Question 28 = 4 marks)

END OF SECTION A

SECTION B

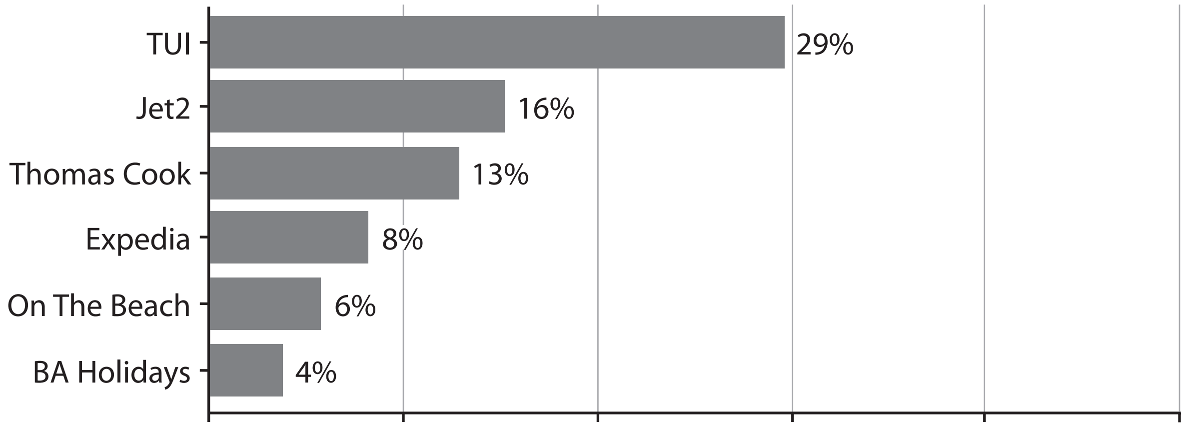
Read all extracts/figures before answering.

Write your answers in the spaces provided.

Question 29

The travel and tourism industry

Figure 1: Package holiday market share of the six largest providers, booked by UK residents, 2019



(Source adapted from: https://knowledge.sharescope.co.uk/2019/10/16/finding-companies-that-control-their-own-destinies/The Times/ATOL)

Figure 2: Jet2 package holiday prices to Sorrento

Price before Thomas Cook shutdown	Price 12 hours after Thomas Cook shutdown
2 Adults for 7 Nights from Monday 25 May 2020	**2 Adults for 7 Nights from Monday 25 May 2020**
Half Board	Half Board
1 x Premium Double or Twin room	1 x Premium Double or Twin room
Return flights from Edinburgh View flight times	Return flights from Edinburgh View flight times
22 kg Bag Allowance	22 kg Bag Allowance
10 kg Hand Baggage	10 kg Hand Baggage
ATOL Protected	ATOL Protected
Coach Transfers	Coach Transfers
Holiday price from **£1,576**	Holiday price from **£1,648**
Per person price **£788**	Per person price **£824**

Data accessed: 22nd and 23rd September 2019

Extract A

Marginal productivity of cabin crew

Cabin crew are responsible for loading passengers and providing in-flight meals. United Airlines is planning to reduce the number of its cabin crew members onboard international flights. The airline currently operates its planes with one more cabin crew member than its competitors. The marginal productivity of this additional crew member may be low. By reducing the number of its cabin crew members United Airlines will be able to operate more efficiently and compete more effectively.

(Source adapted from: https://simpleflying.com/united-airlines-to-reduce-number-of-crew-on-international-flights/)

Extract B

Thomas Cook's environmental impact

Thomas Cook Group plc's operations included its airline and 560 high street travel agents providing flights, hotels and package holidays.

The environmental impact of the travel industry is significant. It accounts for 8% of all global carbon emissions. Thomas Cook recognised the risks presented by climate change and actively engaged in reducing their airline emissions. Its plans included using more efficient aircraft and using lower-carbon fuel. In 2018, Thomas Cook was included in the top 10 of the world's most fuel-efficient airlines.

(Source adapted from: https://www.thomascookgroup.com/investors/insight_external_assest/Thomas+Cook+Sustainability+Report+2018.pdf)

Extract C

Why did Thomas Cook shut down?

Thomas Cook Group plc ceased trading on 23 September 2019. The collapse of Thomas Cook left 600 000 travellers stranded overseas and approximately 21 000 worldwide employees were left without a job.

Thomas Cook's management said that the failure of rescue talks between banks, shareholders and the UK Government meant it had no choice but to shut down the business.

But in truth the tour operator's problems go back much further. A disastrous merger in 2007, increased debts, the internet revolution in holiday booking and Brexit uncertainty all contributed to the failure of the business.

In 2007 it merged with MyTravel. Thomas Cook directors had an objective of rapid company growth over short-term profitability. The merger was supposed to create a European giant, promising £75 million-a-year cost savings and a springboard to challenge emerging internet rivals. In reality, Thomas Cook was merging with a company that had only made a profit once in the previous six years, and the deal left the Group with huge debts. In May 2019, the firm reported a £1.5 billion loss.

The role of the management in Thomas Cook's collapse is being investigated by the UK Government. Thomas Cook executives' salaries and bonuses have been questioned. Directors received salaries totalling £20 million in the five years before its collapse. The Chief Executive Officer (CEO) earned a £500 000 cash bonus in 2017 and about £8.5 million in his five years with the company. It seems that around £4 million of this was in the form of shares. The share price reached £1.46 in 2018, but each share is now worthless.

The CEO said that the directors had worked "exhaustively" to rescue Thomas Cook and create a long-term turnaround strategy. "It is a matter of profound regret to me and the rest of the board that we were not successful."

The UK prime minister admitted that the government refused to grant £150 million as a subsidy to help rescue Thomas Cook in the short run. The UK prime minister stated: "Clearly, that is a lot of taxpayers' money and sets up, as people will appreciate, a moral hazard in the case of future such commercial difficulties that companies face. I have questions about whether it's right that the directors, or whoever, the board, should pay themselves large sums when businesses can go down the tubes like that. One is driven to reflect on whether the directors of these companies are properly incentivised to sort such matters out".

(Source adapted from: https://www.theguardian.com/business/2019/sep/23/thomas-cook-as-the-world-turned-the-sun-ceased-to-shine-on-venerable-tour-operator

and https://www.ft.com/content/a7dd2554-de23-11e9-b112-9624ec9edc59)

29 With reference to Extract C, discuss the proposed government subsidy to prevent Thomas Cook from reaching its shut-down point.

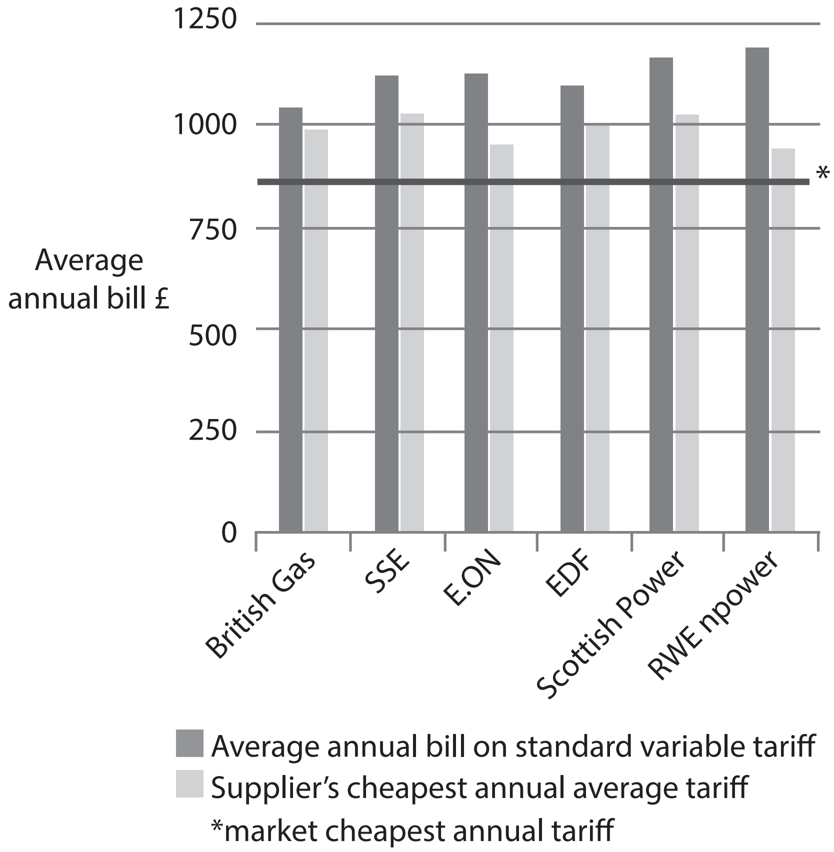
(12)

(Total for Question 29 = 12 marks)

Question 30

Energy and telecommunication markets in the UK

Figure 1: Average annual household bill from the Big Six UK energy suppliers, 2017



(Source: https://www.lovemoney.com/news/67298/standard-variable-tariff-compared-cheapest-deal-provider-savings)

Extract A

Energy price cap to fix 'broken' market in UK

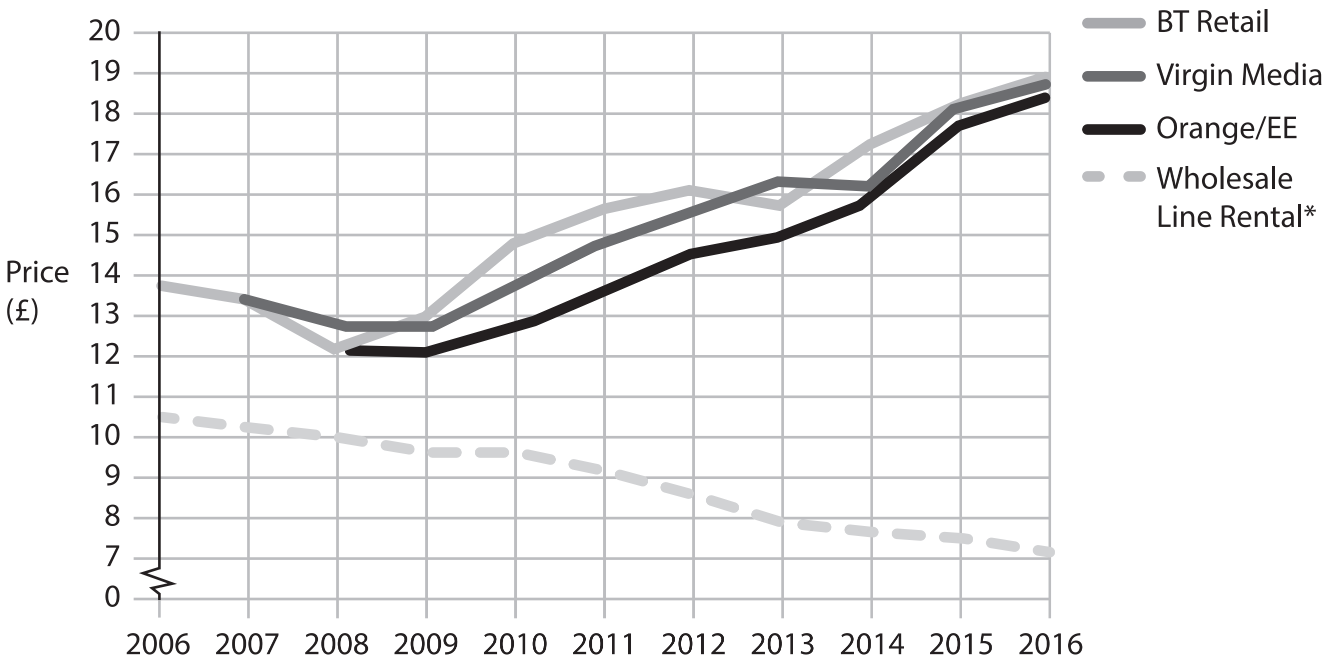
The Prime Minister recently said that the regulator Ofgem (Office of Gas and Electricity Markets) should limit electricity and gas suppliers' most expensive tariffs.

Under the planned new legislation, the energy bills of 11 million households will be capped for as long as five years. The government claimed this cap could save households up to £100 a year. This legislation would force Ofgem to change the licence conditions for energy suppliers so that they are required to cap electricity and gas prices. The measure will apply to anyone on a standard variable tariff, the expensive plans that customers are moved to when cheaper, fixed-price deals end. Ofgem will need to consult energy companies on how the cap is calculated, the government said. The Prime Minister repeated her claim that she had to act because the 'market is broken', a charge the big energy companies reject. "I have been clear that our broken energy market has to change – it has to offer fairer prices for millions of loyal customers who have been paying hundreds of pounds too much," she said.

However, Michael Lewis, chief executive of E.ON said "the government must guard against any unintended consequences that undermine customer service and push up prices as a whole. A price cap will not be good for customers. It will reduce competition and innovation". Smaller suppliers such as First Utility said the Big Six had only themselves to blame for the cap, because they had kept millions of people on standard variable tariffs.

(Source: adapted from 'UK puts energy efficiency at heart of climate change strategy', Adam Vaughan, Copyright Guardian News & Media Ltd 2017 https://www.theguardian.com/money/2017/oct/12/may-energy-price-cap-ofgem-electricity-gas-tariffs)

Figure 2: The monthly rental cost of a telephone landline



*Wholesale line rental – the rental price BT Openreach charges telephone service providers

(Source: https://www.ofcom.org.uk/about-ofcom/latest/features-and-news/landline-prices-review)

Extract B

BT profit rises

BT Group, which includes BT Openreach and BT Retail, reported a rise in profit as revenue increased following the integration of the consumer mobile business, EE. BT finalised the takeover of EE in August 2016, and the integration has resulted in BT controlling 35% of the mobile consumer market. The profit of the UK-based telecommunication group in its second quarter 2017 rose to £566 million.

BT Group chief executive Gavin Patterson said: "We will operate a multi-brand strategy with UK customers being able to choose a mix of BT, EE or Plusnet services, depending on which suits them best. The acquisition enables us to offer great value bundles of services and customers are set to be the winners as we compete for their business".

(Source: adapted from www.marketwatch.com (Oct 27 – 2016) and http://home.bt.com/news/bt-life/bt-to-retain-ee-brand-as-acquisition-confirmed-11364037422234)

Extract C

BT to slash landline charges for 1 million customers

Rental charges for landline-only customers – households with a telephone-only contract but no BT broadband – will fall from £18.99 to £11.99 per month after the regulator attacked existing deals as 'poor value for money'. This rental reduction will save a million landline-only customers £84 a year.

The regulator Ofcom (Office of Communications) said it stepped in because these bills for landline-only customers – nearly two-thirds of whom are over 65 – have "soared" in recent years. This is despite BT and other landline providers benefiting from significant cuts in the wholesale line rental cost of providing the service by BT Openreach. Many landline-only customers are elderly, and have been with BT for decades. Ofcom has focused on BT because it accounts for two-thirds of the UK's 1.5m landline-only customers.

A spokesperson for Ofcom said "This position [of dominance] has allowed BT to increase prices without much risk of losing customers, and other providers have followed BT's pricing lead. We expect BT's price cut to mean other providers will follow suit". Ofcom said that over three-quarters of BT's landline-only customers have never switched provider, which has left them a prime target for price rises. The regulator said that all major landline providers have increased their line rental charges by between 23% and 47% in recent years, while their own costs for providing the service have fallen about 27%. Ofcom said it is also looking at measures to help people shop around for better deals with more confidence.

(Source: adapted from 'BT to slash landline charges for 1m customers', Mark Sweney, Copyright Guardian News & Media Ltd 2017 https://www.theguardian.com/business/2017/oct/26/bt-to-slash-landline-charges-for-1m-customers)

30 Discuss **one** likely reason for the rise in BT's profit (Figure 2, Extracts B and C). Use a cost and revenue diagram to support your answer.

(12)

(Total for Question 30 = 12 marks)

31 Apple and Samsung

Extract 1 Jury awards over $1billion in patent victory to Apple

Apple has won a powerful victory in its US patent battle with Samsung, after a jury found that the South Korean electronics firm breached design patents. The jury awarded $1.05 billion in damages to Apple because they found that Samsung had copied features such as 'rubberbanding' scrolling, its sleek glass front, its touchscreen features such as 'tap to zoom' and 'bounce back' scrolling, its edge-to-edge glass front, rounded corners and app icons.

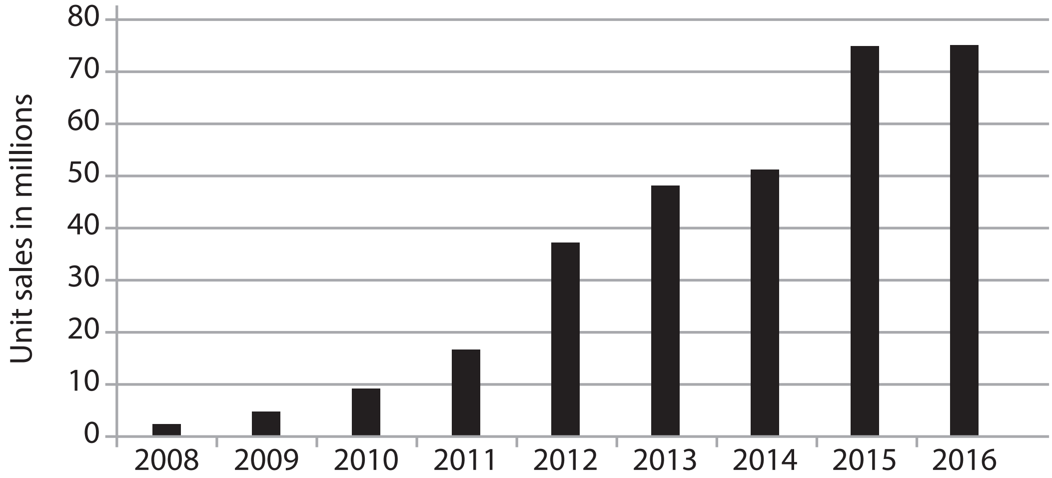
The verdict that consumers could be confused between the two companies' products will send shockwaves through the smartphone industry, with implications for other handset makers that use Google's Android operating system. Analysts point out that the US ruling will have a global effect, because smartphone makers will be unwilling to create different products for different markets, to continue to innovate, to offer choices and to lower prices for the consumer.

(Source: © The Financial Times Ltd, 25 August 2012)

Figure 1 A Samsung Galaxy and an Apple iPhone

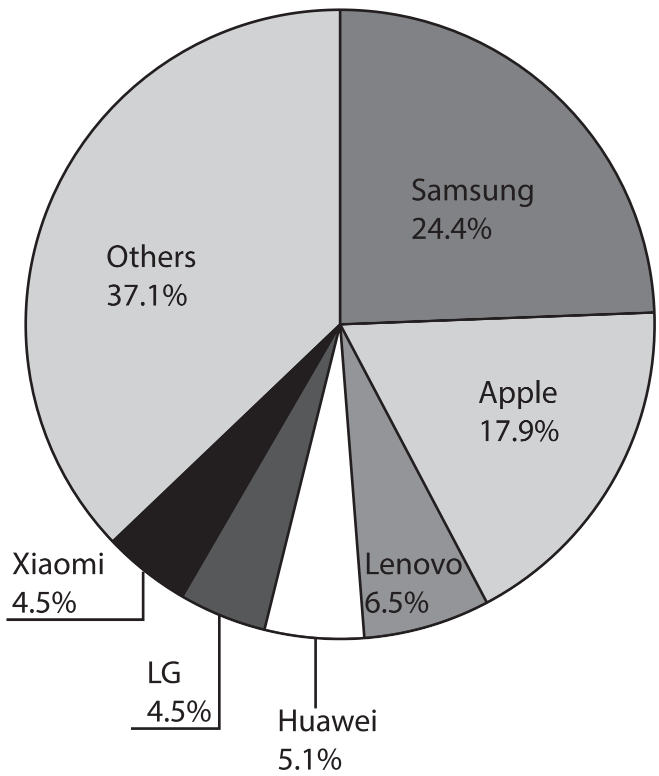
(© Pieter Beens/Shutterstock)

Figure 2 iPhones sold in the first quarter of each year, globally (millions)



(Source: http://ichef-1.bbci.co.uk/news/624/cpsprodpb/C553/production/_87951505_iphonesales.png)

Figure 3 Global market share of smartphones, 2015



(Source: http://cdn2.dazeinfo.com/wp-content/uploads/2015/04/worldwide-smartphone-shipments-share-Q1-2015.png)

Extract 2 Apple: the only way is down?

If Apple's revenue was compared to a country's GDP, it would be only slightly smaller than that of Denmark. Impressive though this may be, Apple's record-breaking profits are under threat if Chinese growth slows down. To date, Apple has sold more iPhones in China than in the US. This quarter's recent profits – $18 billion for the first quarter of 2015 – reflect Apple's ability to maintain profit margins even while selling phones in China at reduced prices in order to enter that market. The iPhone and iPad are superb devices, but they are not so radically different from those made by rivals. It is economies of scale that preserve Apple's position, while others struggle to innovate, design and produce in such numbers.

Competitors envy those profit margins, and talk about 'democratising' technology, which means bringing prices down to make equally beautiful devices attainable for all. It is, for now at least, a very optimistic view. That's largely because the iPhone combines the 'cool' factor with superior design and, unless Apple's image is ruined, it will continue to be more attractive to millions of consumers than any other phone. No other manufacturer, whether South Korea's Samsung or China's Xiaomi, has managed to break into the high-cost, high-margin market in the same way as Apple. The same is true with the iPad, and the same is likely to go for the Apple Watch.

What, however, happens next? No company has ever sustained such world-beating performance for years on end, and when it comes to technology new trends come and go from various companies all the time. Statistics suggest Apple's sales and profits are likely to be affected by the global slowdown in growth, most particularly that of China, and turbulence in world markets.

But there are two key things to consider: first, there is a new technology landscape that makes monopolies more likely than ever. We are all likely to use one search engine online. We are similarly loyal to operating systems and devices with which we are familiar. Apple has built its success on repeatedly delighting consumers and reinforcing their loyalty. The bond between Apple and consumers looks stronger than ever, and the company's financial performance simply reflects that. This problem makes it difficult for regulators to determine appropriate competition policy.

Second, is a point that doesn't get made often enough: Apple's iPhone is the device that drives its profits, and the iPhone 6 may be the best iPhone ever made but it is an evolution of the original 2007 device. Its new Watch is an exciting prospect, but the phone itself remains the driver of profits. As more and more competitors catch up, Apple's ability to maintain its lead is likely to rely on ever more marginal improvements. At which point marketing is all that's left – and how many consumers will value marketing over the pound in their pocket? A new technological breakthrough may be needed to maintain Apple's dominance in the future.

(Source: adapted from Matt Warman, 28 Jan 2015, *The Telegraph,* http://www.telegraph.co.uk/technology/apple/11373701/Apple-the-only-way-is-down.html)

(a) With reference to Extract 2, explain what is meant by economies of scale.

(4)

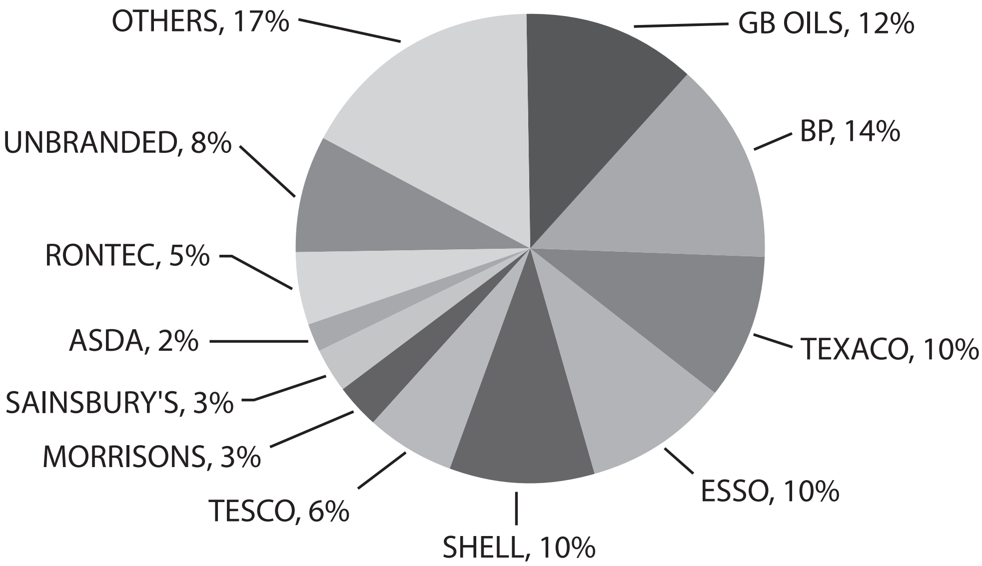
(b) Examine the likely effect of a further slowdown in growth in China on the profits of Apple. Use a cost and revenue diagram to support your answer.

(8)

(Total for Question 31 = 12 marks)

32 Motor Fuel Prices

Figure 1 UK petrol retail market share



(Source: http://i.dailymail.co.uk/i/pix/2013/01/15/
article-016f425cb000005dc-950_634x373.jpg, accessed 1 April 2016)

Extract 1 Predatory pricing of petrol

Supermarket price wars are putting Britain’s small petrol stations out of business at a rate of one a day. Sainsbury’s, Tesco, Asda and Morrisons have embarked on a war to attract hard-hit consumers, and the price of fuel has been central to their campaign. Morrisons is offering loyalty points on its new fuel card while Asda has launched a price comparison app for mobile phones to convince shoppers it has the cheapest fuel. Both Sainsbury’s and Tesco have offered money-off vouchers for petrol customers.

The Retail Motor Industry Federation (RMI), a trade association representing the interests of 6 000 small petrol stations, is hoping that the inquiry by the Competition and Markets Authority (CMA) will support its members, who believe that unfair and predatory pricing by the supermarkets and some major oil companies is making it impossible for them to compete. There are now about 8 000 small petrol retailers compared with 21 000 two decades ago and 40 000 in 1966. It predicts that in five years there will be very few independent petrol retailers left.

The CMA inquiry comes at a time when the supermarkets have proved particularly effective at building up a huge stake in the petrol market. In 2015, supermarkets accounted for 50% of total fuel sales from just 1 316 sites compared with 37.4 % in 2010. The CMA said the fuel market for Britain’s 33 million motorists is worth around £32 billion a year, and accounts for 5p in every £1 of household expenditure.

Households are keen to save even one or two pence a litre, particularly those families whose livelihoods depend on the use of a car.

The RMI has been gathering evidence from its members to support the argument that the supermarkets have been involved in unfair pricing. Small garages typically make only 5p in profit on a litre of petrol, while major supermarkets were using tactics described as ‘loss leading’. It is also blaming the major oil companies for unfair dual pricing. That means they sell to their own garages at one price and then to an independent retailer down the road at a higher price. There is evidence of ‘price co-ordination’ – otherwise known as price-fixing.

When the price of crude oil goes up, the prices motorists pay go up almost immediately – but when the oil price falls, retail fuel prices don’t reflect that fall as markedly.

Andy Peake, Asda’s Petrol trading director, said: “We welcome the CMA’s decision to look into petrol and diesel prices. At Asda we are committed to doing everything we can to bring motorists the lowest possible fuel prices. Our preference would be that everyone is charged a national price for fuel, that way drivers would be treated as equals regardless of where they live.”

(Sources: adapted from http://www.dailymail.co.uk/news/article-2198634/Energy-giants-face-petrol-price-probe-Market-risk-manipulation-warns-watchdog.html and http://www.thisismoney.co.uk/money/cars/article-2200297/Small-petrol-retailers-devastated-aggressive-supermarket-pricing.html)

Extract 2 Petrol retailers turn to coffee to drive sales

Caroline Harris, marketing director at Costa Enterprises, says: "There is a considerable amount of profit to be made by selling a product that has become an indispensable part of many people's daily routine. Petrol retailers can capitalise on this growing demand by offering their passing trade quality branded coffee 'on the go'. What's more, Costa has been voted the nation's favourite for the third year running making the beverage range and offer from Costa a 'must stock'."

She says research from Allegra shows the two key factors that determine consumers' choice in coffee are convenience and quality. Consumers increasingly expect to be able to grab a cup of coffee on the go wherever they are, which is good news for petrol station forecourts, as it almost guarantees a captive audience for coffee. "The research shows that 'quality' has grown in importance for consumers and should therefore be an absolute must in attracting and retaining customers. Customers are more likely to revisit and recommend a consistently good product, which will in turn drive sales for the forecourt operator."

Meanwhile, in specific research on buying behaviour, Costa found that 'buying a coffee' is the main reason for 29% of visitors to a forecourt, and a third of these people, importantly, ended up buying unplanned items as a result. Furthermore, 85% of forecourt customers stated that they are now looking to purchase 'quality' coffee that they can 'grab and go' when out and about.

Says Harris: "It also identified that Costa Express brings drivers into the forecourt. 57% of the people asked said that Costa Express increases the likelihood of them visiting a forecourt, with over a third saying they would go out of their way to visit a site with Costa Express and 91% choosing Costa Express because 'the coffee always tastes great'."

Starbucks coffee is also available on many petrol station forecourts. Euro Garages is now extending its partnership with the use of Starbucks 'On The Go' machines. With 57 sites already boasting these machines, customers who are busy and on the move can now purchase their Starbucks beverages to take away. "Plans are in place to rollout the Starbucks On The Go machines throughout the 120 forecourt locations," explains Salim Hasan, head of operations at Euro Garages. "The Starbucks On The Go offer now completes the forecourt consumers' coffee experience and they can now choose whether they want to sit and enjoy their beverage in the comfort of a store, use the drive-through facility or simply pick up a drink while in the forecourt."

(Source: adapted from http://www.forecourttrader.co.uk/news/fullstory.php/aid/7515/Brands_mean_growth.html 02 September, 2013)

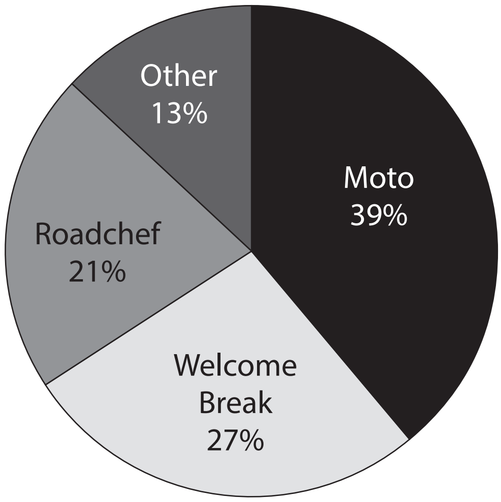
32 Using an appropriate cost and revenue diagram, examine whether the number of independent petrol retailers in the UK will continue to fall.

(12)

(Total for Question 32 = 12 marks)

33 Motorway Service Areas (MSAs) in the UK

Figure 1 Market share of MSA sites in the UK (103 sites)



(Source: Mintel, Operator reports, 2010, http://reports.mintel.com/display/540116/?__cc=1)

Extract 1 Letter concerning monopoly pricing at Motorway Service Areas

I am writing to bring to your attention the issue of petrol prices. Returning from Germany yesterday evening, I needed to buy petrol on the M25 and stopped at a service station, not wanting to add extra miles or risk getting lost by coming off the motorway. Normally the price is advertised in advance but in this particular case it wasn't. I was horrified to see that I was being charged £1.47 which as you'll know is more than 15 pence above the average rate across the country. I had no choice but to buy the petrol at this price. Everyone knows that petrol is more expensive at motorway services, but I am writing to ask you to consider putting a cap on the amount of profiteering by these firms selling petrol at inflated prices. In some European countries it is normal to see the price at a service station and the next two after that so you can make a choice as to where to stop and buy your petrol, but in this country it's a complete monopoly.

Letter to the Highways Agency November 2012

Extract 2 Pricing at Motorway Service Areas

It's no secret that Motorway Service Areas manage to provide the seemingly impossible combination of being both notoriously expensive and notoriously poor quality. This is usually attributed to the fact that they are seen to have a captive market and a monopoly on the motorway, often being the only easily accessible facilities for at least 15 miles, the minimum distance permitted between MSAs. However, the gap between MSAs often exceeds 50 miles.

Before we start complaining about the prices of services, we should first work out what we're comparing them to. While the obvious comparison would be a supermarket or high street shop, a more accurate one would be an airport or railway station – places which are also under fire for their high prices. If services were making as much money as some people think they are, there would be more operators and applications for new services.

(Source: adapted from www.motorwayservicesonline.co.uk)

Extract 3 Pressure on for motorway services operators with vast debts

How to get today's motorway users to spend money is a major problem that Roadchef and its rival operators Moto and Welcome Break have had to tackle. And with collectively hundreds of millions of pounds of debt on their balance sheets, the pressure is on.

In 2007, Welcome Break, Britain's second-biggest motorway services operator, was on the brink of exiting the industry as it desperately tried to rearrange its £376 million debt. Roadchef, its smaller rival, was also struggling. Like Welcome Break its credit rating had been downgraded and it was in danger of breaching its debt arrangements. Roadchef was bought by Israeli property company Delek Group. Welcome Break and Roadchef, along with Moto, still have vast debts, with servicing costs in the range of £15 million and £78 million a year.

But why is there so much debt in these companies when motorists regard service stations as roadside goldmines for their owners because of 'captive' customers and high prices? One reason is the huge investment needed. Moto says its new service area at Wetherby, West Yorkshire, cost £24 million to build. There are also the high overheads caused by its many obligations. Service stations must be open 24 hours a day, 365 days a year. There is a legal requirement to provide free parking for at least two hours, toilets, hot food and drink. Yet they are still not allowed to market themselves as destinations in their own right, mainly because of fears that traffic building up on the slip roads could cause accidents on the motorways. And they are still not allowed to serve or sell alcohol, a high-margin product for retailers.

Does it matter that the service stations are massively indebted? According to one commentator, 'The attractive thing about these companies is that they generate a huge amount of cash. If you can use that to service the debt and still make a profit, what does it matter that you are not going to pay the debt off?'

(Source: adapted from http://www.thisismoney.co.uk/money/markets/article-2018000/
Pressure-motorway-services-operators-saddled-vast-debts Sarah Bridge July 2011)

(a) Examine **two** possible reasons why a motorway services operator might exit the industry.

(8)

*(b) Discuss the likely impact on the profitability of motorway services operators if they are forced to display the prices of petrol at other outlets further along the motorway (Extract 1). Use a cost and revenue diagram to support your answer.

(12)

(Total for Question 33 = 20 marks)

34 Price fixing in the baby milk powder market

Extract 1 Soaring baby milk prices provoke price fixing claim

Firms producing baby milk powder, known as formula milk, are making huge profits on exports to China. In 2012, the total share of the top five foreign formula milk brands reached 60% of the Chinese market. A climate of panic among parents in China over the safety of domestically produced formula milk was pushing prices ever higher. The competition authorities in China have accused foreign firms of participating in a conspiracy to fix the price of formula milk. They are being investigated for alleged price-fixing and anti-competitive behaviour.

Wyeth Nutrition, which Nestlé bought in its \$11.9 billion takeover of Pfizer's baby food business, is accused along with other formula milk producers of "violating anti-monopoly laws via high prices and limited market competition" by the Chinese regulatory authority, the National Development and Reform Commission (NDRC). Wyeth Nutrition has been actively co-operating with NDRC's review of the industry, a spokeswoman from Nestlé said.

Parents, fearful that the local formula milk products may be counterfeit or otherwise tainted, go to extreme lengths to buy imported formula milk. This follows the scandal in 2008 when melamine, in domestically produced formula milk, killed six babies and caused sickness in 300 000 others. A tin of foreign-made formula milk that sells for £10 in Britain retails for as much as £30 in China. A flourishing black market has led to tins of milk powder being smuggled in from Europe and sold online. Prices have risen by 30% since 2008. "People are willing to pay that amount for a product from a brand they trust to have better safety, particularly when it involves children and babies," said James Roy, a senior analyst. He said that consumers are unhappy and that the government is responding by exerting pressure. He thought it unlikely that the companies were engaging in real price fixing.

(Source: *The Times,* 3 July 2013)

Extract 2 Fines on foreign formula milk producers

China has temporarily banned some imports of formula milk. In August 2013, China's price regulator imposed fines equivalent to £71 million on five foreign formula milk producers following an investigation into price fixing.

Analysts said the investigation into formula milk pricing was part of a broader Chinese plan to boost consumption of local formula milk products. But they said the fines were unlikely to damage the reputation of the affected companies. If anything, foreign formula milk producers might increase their market share because of the price cuts resulting from the investigation.

"It will have an impact on domestic brands over the long term as the prices of high-end premium brands come down. Customers will tend to buy the foreign brands as the price gap between domestic and foreign brands narrows," said Jacqueline Ko, an analyst at Maybank Kim Eng Research.

Fonterra, one of the companies fined, said it would give additional training to sales staff and review its distributor contracts in the wake of its fine. "We believe the investigation leaves us with a much clearer understanding of expectations around implementing pricing policies," said Kelvin Wickham, a senior executive of Fonterra.

"There have been some small [price-fixing] cases previously, but nothing of this scale," said one lawyer who defended a company involved in the investigation. "There is real political momentum behind this. Inflation and product safety are at the top of the government's agenda." As China's economic growth rate threatens to slow below the official target of 7.5%, the Chinese government is concerned about growing public anger over the price and quality of essential goods and services such as formula milk.

(Source: http://uk.reuters.com/article/2013/08/07/uk-china-milkpowder-idUKBRE97602U20130807 and China fines milk formula makers in pricing probe http://www.ft.com/cms/s/0/d40bda56-ff06-11e2-97dc-00144feabdc0.html?siteedition=uk#axzz2g1t7sgtP)

Extract 3 Chinese government to give $4.9bn to domestic formula milk producers

Chinese formula milk producers, including Inner Mongolia Yili Industrial Group and China Mengniu Dairy, are set to get 30-billion yuan ($4.9 billion) in official funds to support mergers. The plan is to reduce the number of domestic formula milk producers in the highly fragmented market over the next five years from 200 to 50. This will create stronger sector leaders to increase the ability of companies to compete with international rivals who dominate the premium end of China's $12.4bn formula milk market.

Chinese formula milk firms would gain the support in the form of government subsidies, funds from China Development Bank and favourable tax policies, the China Business Journal said. The total amount would be about 30-billion yuan, it said.

(Source: http://www.bdlive.co.za/world/asia/2013/09/23/state-to-give-chinese-milk-powder-makers-4.9bn, September 23 2013, 09:05)

34 With reference to Extract 3 and your own knowledge, examine the likely impact of government subsidies on the profits of Chinese formula milk producers.

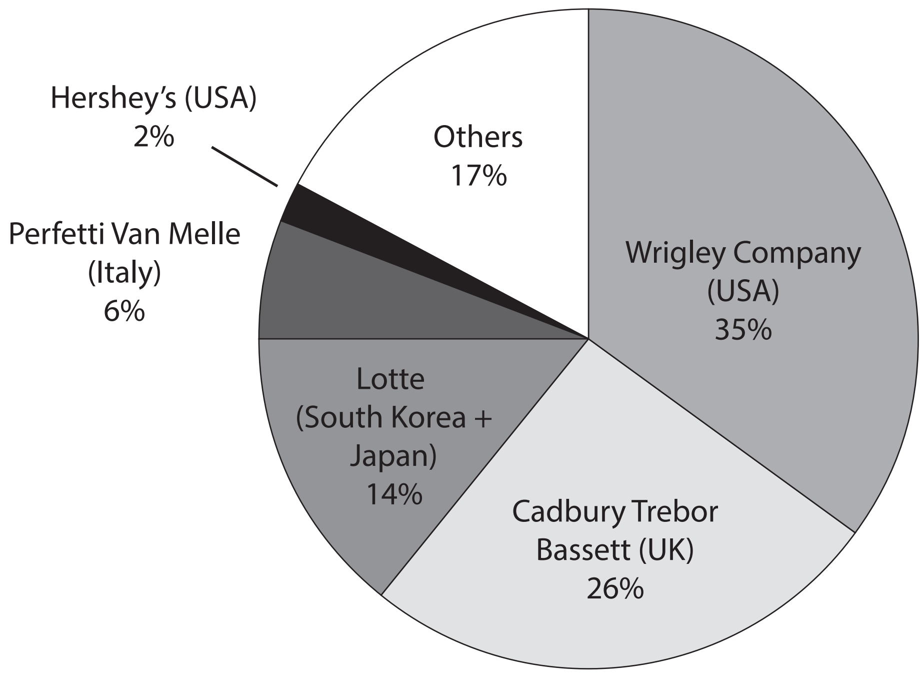
Use a cost and revenue diagram in your answer.

(8)

(Total for Question 34 = 8 marks)

35 The chewing gum market

Figure 1 Global market shares for chewing gum manufacturers



Extract 1 British designers create non-stick chewing gum that dissolves

Chewing gum is a problem worldwide and has even been banned in some countries. Normal chewing gum is made from synthetic latex, which is resistant to the weather and is strongly adhesive. A piece of gum costs around 3 pence to make, but it costs an estimated 10 pence to scrape it off the pavement using freezing machines, corrosive chemicals or even high-pressure steam hoses. The UK Government currently spends £150 million each year removing chewing gum from the streets using chemicals.

Recently a non-stick chewing gum that dissolves within just 24 hours has gone on sale in the US. The gum, developed in Britain, contains a special polymer which makes it far less sticky. 'Rev7' has the same taste and texture as normal chewing gum, but is water soluble and can be easily removed from clothes using soap and water. This ability to retain water also results in a longer lasting flavour which improves the experience for consumers. It is also more effective when used as a nicotine gum, designed to help smokers give up cigarettes, because it releases the nicotine in a more controlled way. Tests show that most of the gum can be removed by conventional street cleaning. Any gum washed into the drains will degrade into minerals, biodegradable products and inert materials.

Designer Terry Cosgrove, a scientist at Bristol University, said: "The motivation to invent the product came from seeing chewing gum on the streets in this country and in America. It's everywhere. The materials developed can be used for lots of other uses such as anti-graffiti paint and bacterial protection. But because chewing gum is such an enormous problem at the moment we decided to target this as our main area. This is like a dream come true for me, seeing academic research result in a real commercial product." He reportedly offered the product design to Wrigley's, the current market leader in chewing gum, but no agreement was made.

Instead, Revolymer was set up in Wales in 2005 based on technology developed by Cosgrove at the University of Bristol. Revolymer was awarded patents relating to the Rev7 polymer technology, and the firm was aided by a grant of £1 million given in 2006 by the Welsh Assembly Government and the South West Regional Development Association to support the development of removable chewing gum. "There are also several other exciting ventures in the pipeline" said Cosgrove.

(Sources: adapted from www.telegraph.co.uk 5 October 2010 and www.revolymer.com/history March 2013)

Extract 2 Rev7 is withdrawn from US market

Revolymer is to stop directly selling its 'Rev7' confectionery gum in the US at the start of 2013. The US gum market as a whole is shrinking and there is a challenge to Revolymer's patent for nicotine gum products by other gum manufacturers. The firm said the shut-down of sales of Rev7 in the US is set to incur a one-off cost of £360 000 but the annual cost base of its US operation is £500 000 which it said would not be incurred in the future.

Its Rev7 gum has recently been launched in Ireland in partnership with the Topaz service station network as an initial test market for the rest of Europe.

Revolymer is seeking more commercial partnerships for its nicotine gum. The first product resulting from such a partnership was launched in Canada in 2012. In a statement, Revolymer said: "Management continues to believe that Revolymer's strategy of licensing its technology to commercialisation partners, rather than seeking to market its own products, will generate significant shareholder value."

(Source: adapted from www.insidermedia.com 20 December 2012)

35 Using a cost and revenue diagram, discuss **two** reasons why Revolymer is to stop selling its Rev7 confectionery gum in the US.

(12)

(Total for Question 35 = 12 marks)

36 Camera retailing

(Source: metro.co.uk)

Extract 1 Peter Jones reopens Jessops

Jessops, the photography retailer, made a surprise return to the high street in March 2013 when Peter Jones, one of Britain's best-known entrepreneurs on the BBC programme *Dragons' Den*, relaunched the chain 11 weeks after it collapsed. Jessops, which was founded in Leicester in 1935, reached shut-down point in January 2013. Jessops suffered both from consumers' shift to buying cameras on the internet and their increased reliance on cameras built into mobile phones. Mr Jones became Chief Executive of Jessops after buying the firm from its administrators PricewaterhouseCoopers. Mr Jones made his money from the telecoms industry and operates some stores for Vodafone and has online retail investments. He has invested £4 million in Jessops and will reopen around 40 shops, far fewer than the 187 shops the retailer had before.

"Britain's high street is fighting back," Mr Jones said as he reopened a refurbished flagship Oxford Street store, adding that shops could compete with online traders if prices are competitive. "Who would *not* want to buy a camera from expert and enthusiastic staff?" he said. Stores will feature areas to try out products before buying. Customers will be able to create photo albums and take photography courses through the Jessops Academy. Staff will also turn photos into calendars and posters while you wait. Mr Jones said companies such as Apple had proved that customers would spend time and money in a welcoming environment with quality staff in busy locations. "It is very Apple-ish. We have learnt from other retailers, I believe Jessops is an iconic British brand which can lead the retail resurgence on Britain's high streets, powered by new innovations and world-leading, expert staff" he said. "Image is everything and, even in the mobile and tablet era, there's no substitute for a quality camera when it comes to taking the perfect picture."

Mr Jones has reduced fixed costs from £8 million to £1.5 million by cutting administration costs, closing stores and further rationalisation. Jessops will have outlets in centres such as London, Birmingham, Manchester and St Albans, with six opening immediately. Jessops will hire as many as 500 staff and many are drawn from the 1 400 who lost their jobs when it collapsed. "A lot contacted me on Twitter and asked for a job and it's great to have them," said Mr Jones.

Prices will be matched to those of Jessops.com and Mr Jones said it would be "competitive" with other online retailers such as Amazon. "We will make our profit margin on the accessories," he said. He said "click and collect" would be a powerful driver of sales and Jessops promised greater integration with its online presence, including an option to collect internet orders at store. "I think Amazon will start to lose their market share because they do not have a collect at store. Nobody likes waiting in for a delivery."

Mr Jones forecasts sales of more than £80 million in his first year and expects to take some 15% of the digital single lens reflex camera market in the UK. Revenue before Jessops shut was £304.6 million, but the firm is said to have made a loss of £12 million in the fifteen months up to its closure.

More than 10 000 jobs have been lost in retail this year as chains such as HMV and Republic have fallen into administration. However, Mr Jones is not the only person to see potential in the high street despite flat retail sales. Sports Direct bought fashion chain Republic while Gordon Brothers Europe, the private equity firm, this week bought Blockbuster UK, the entertainment group, out of administration and will keep half its 528 stores open, claiming it can "bring new life" to them.

(Source: adapted from By Andrew Bounds FT.com 28 March 2013, www.ft.com/cms/ and www.thisisleicestershire.co.uk)

(a) Using examples from the data, explain what is meant by a 'shut-down point' (Extract 1 line 4).

(4)

(b) Using the data in Extract 1 and an appropriate diagram, discuss why Jessops was making a loss before it went into administration.

(8)

(Total for Question 36 = 12 marks)

37 Egg farming, egg distribution, food manufacturing and supermarkets

Extract 1 A letter from a chicken farmer

Our problems started four years ago when the big egg packaging and distribution firms merged, purchasing nearly 70% of the eggs produced. I lost £40 000 last year and I could see the profits of Noble Foods [the UK's biggest egg distributor] increasing. There was no competition anymore and prices paid to egg farmers stayed low, while everything else, like the cost of chicken feed, was going up. New EU regulations preventing the housing of hens in conventional 'battery' cages have meant installing new cages, costing over £14 per hen. Many egg farmers like me are unable to absorb the costs of buying the new cages and some egg farmers have left the industry. 750 000 hens have been slaughtered across the UK.

Extract 2 The egg distribution business - profile of Noble Foods Limited

Noble Foods, the UK's largest egg packaging and distribution business, operates 160 vehicles from seven sites, 365 days a year, employing over 150 full-time drivers in temperature controlled vehicles. Eggs are collected from over 325 individual farm producers located throughout the UK and transferred to a packing centre, where they are sorted and boxed for delivery to customers. Pre-tax profits at Noble Foods increased by £1.4 million in 2011.

(Source: © 2011 Noble Foods Ltd)

Extract 3 Increased costs of eggs for food manufacture

Eggs – both in liquid and powdered form – are used in a variety of food products from biscuits and cakes to pasta and mayonnaise. The reduced supply of eggs, caused by the new EU regulations, is damaging the profits of some food manufacturers. Several of them are closing down their production lines because they cannot afford the soaring cost of eggs from distribution firms. However, they cannot raise their prices because supermarkets refuse to pass on any increase to consumers.

Extract 4 British farmers forced to pay the cost of supermarket price wars

Farmers say they are being forced out of business by the unfair buying practices of supermarkets. Discounts such as "buy one get one free" are not a generous gift from the supermarket. There is public ignorance of how supermarkets buy produce and the system that allows them to offer lower prices while increasing their profits. Tesco's profits were above £3.5bn for the first time last year and Sainsbury's rose by nearly 13%. These results are achieved largely by getting suppliers to reduce their prices or not pass farmers' cost increases through to the supermarkets. Most sectors of British farming, from eggs to fruit, vegetables and pork, have had reduced prices paid for their produce in the past year, despite record increases in costs.

(Sources 1, 3 and 4: adapted from © The Guardian 2 July 2011, © The Observer and © Parliamentary copyright 2011)

Figure 1 Egg types in the EU

Types of eggs produced in EU	Minimum cage requirements per hen	Market share in UK, 2012 forecast
Hens in conventional cages, 'battery'	550cm^2	Banned January 2012 under new EU regulations
'Caged' hens in EU-compliant cages	750cm^2 and a minimum height of 45cm with nest area, perching space and a scratching area	49%
Barn eggs	1110cm^2 free to move in large indoor area	4%
Free range eggs	As barn, with daytime access to open air pen, 4m^2	44%
Organic free range eggs	As free range, plus organic food (no artificial growth enhancers)	3%

Figure 2 UK egg market information 2011

Egg production	9 691 million eggs
Egg consumption	11 512 million eggs (32 million per day)
Consumers of eggs in the UK	
Retail (supermarkets etc.)	47%
Food Manufacturers	25%
Foodservice (hotels, restaurants)	28%

(Sources for Figure 1 and Figure 2: permission to reproduce granted by the British Egg Information Service, www.britegg.co.uk and © European Union, http://eur-lex.europa.eu/)

37 Using a cost and revenue diagram, examine why some egg farmers are leaving the industry. Refer to Extract 1 in your answer.

(8)

(Total for Question 37 = 8 marks)

38 The UK household energy market

Extract 1 Price cuts by the 'Big Six' energy companies

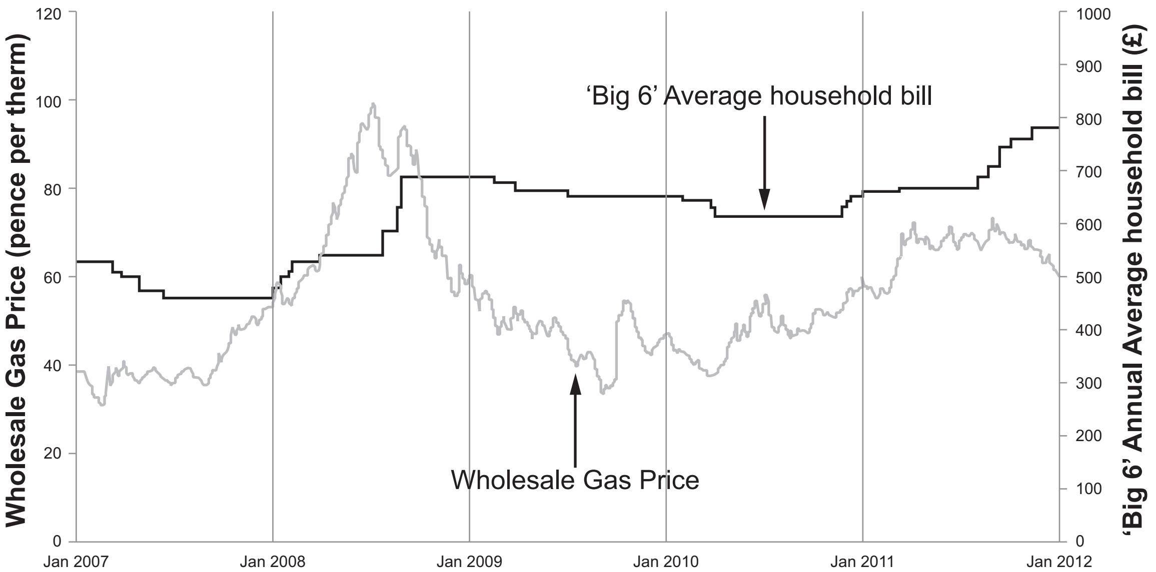
99% of all gas and electricity bought by households in the UK is supplied by the 'Big Six' energy firms, British Gas, Scottish and Southern Energy (SSE), Scottish Power, E.ON, EDF Energy and npower. The combined profits of the 'Big Six' reached £15 billion in 2011, up £2 billion on the previous year, with an average profit per customer of £80 a year.

British Gas, which supplies both gas or electricity to half of UK households, cut its electricity prices by 5% in February 2012 but kept gas prices unchanged. This was quickly followed by SSE cutting 4.5% from its gas prices. British Gas had been expected to cut prices after another of the 'Big Six' energy providers, EDF Energy, announced it would be reducing gas prices by 5% with effect from 7 February 2012.

However, the cuts were smaller than expected. The average standard tariff for a customer buying both gas and electricity from the same supplier will remain on average £1 250 a year (doubled since 2005). The price cuts will only reduce bills by between £24 and £28 per year for the average household. 5.5 million households will remain in fuel poverty, meaning that they are spending at least 10% of their income on power.

(Source for Figure 1 and Extract 1: adapted from © The Guardian News and Media Limited, 2012)

Figure 1 A comparison of wholesale and retail price of gas



Extract 2 Energy regulator tells firms to cut their prices or face tough controls

A price cap, RPI-X, on energy bills could be introduced for the first time since 2002, according to the regulator Ofgem. There are rising concerns that customers are being exploited by the 'Big Six' energy firms. The energy firms will have to simplify their pricing structures (tariffs) this year. If this fails the whole industry will face a Competition Commission inquiry which could force a break-up of its dominant players. Ofgem said: "Parliament has given us the task of trying to create an effective market where competition is the downward pressure on prices. We think that's the way to go, although we haven't ruled out regulation, particularly for more vulnerable customers, if our reforms don't work." Energy campaigners are calling for a windfall tax on excessive energy profits and for the money to be used to help in the fight against fuel poverty by making homes more energy efficient.

Rising global demand for energy and the end of cheap North Sea gas are responsible for most of the increases but consumer groups also believe suppliers are keeping bills artificially high. One of the 'Big Six', the French-owned EDF Energy, reported a near trebling of its annual profits to €3 billion (£2.5 bn), with profits from its British operations rising 8.5%. EDF Energy is currently the subject of two Ofgem investigations into poor customer service and inappropriate selling methods. Ofgem is currently consulting on forcing the 'Big Six' to set uniform standard charges to allow consumers to compare raw costs, or unit prices, more easily. Ofgem is also intending to sweep away the hundreds of different tariffs operated by the companies into just two types – standard and innovative. In 2008 Ofgem ran a nine-month inquiry after all the energy companies raised their prices within a few weeks of each other. No evidence of collusion was found but action was proposed to ensure that smaller independent companies are not kept out of the supply market. The price movements look like tacit collusion but the regulatory authorities lack the power to prove this.

Ofgem's faith in an unregulated free market has been shaken by the failure of the 'Big Six' to embrace its previous reforms of bills and tariffs. Although it says it is "encouraged" by recent attempts by some suppliers to simplify charges, it is closely monitoring their performance and failure to comply will trigger a full Competition Commission inquiry. Companies need to narrow the widening gap between wholesale and household energy prices. "Consumers are right to ask whether the market structure is right and whether regulation of prices is the answer," said Ian Marlee, a senior Ofgem official.

(Source: adapted from Martin Hickman © The Independent, www.independent.co.uk and © http://www.regulation.org.uk/energy.shtml)

38 Using the information provided, discuss **one** reason why the 'Big Six' energy firms have seen combined annual profits rising to £15 billion since 2009. Illustrate your answer with a cost and revenue diagram.

(8)

(Total for Question 38 = 8 marks)

39 Government intervention in markets

Number of UK Private Finance Initiative (PFI) projects per year

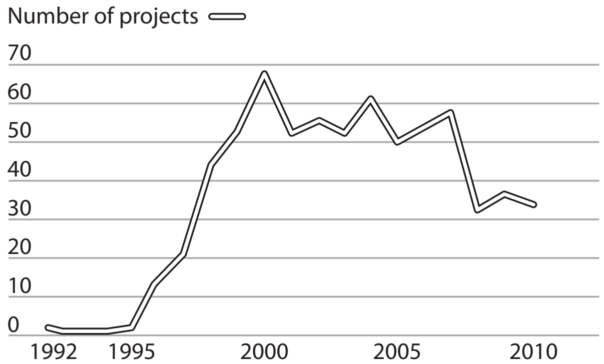


Figure 1

Value of UK Private Finance Initiative (PFI) projects per year

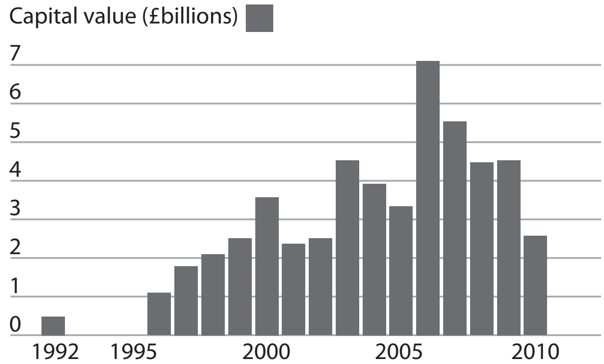


Figure 2

Extract 1 The private finance initiative is divisive

The private finance initiative (PFI) introduced in the UK in 1992 has delivered 700 major items of British infrastructure and services, raising £70 billion of capital for major projects such as new hospitals, schools, prisons and new roads. These services are being provided now, to be paid for by taxpayers in the future. In the PFI model, the private sector takes the risk – that is, it is intended that the PFI firm pays fines or the losses if the project is delivered late or over budget, or fails to perform once up and running. There is some proof that PFI works: for example, the Olympic Delivery Authority completed construction of the venues for the 2012 Games under budget. However, if the costs of the project go above the contracted amount, the private sector pays the difference. For example, McAlpine lost £100 million on the Dudley hospital project in the West Midlands.

Some economists are asking whether PFI is proving value for money. Private sector borrowing costs more than government borrowing. These higher interest rates add to the capital cost of PFI projects. Payment for these PFI projects – including their running and maintenance – will cost taxpayers £240 billion up to 2050. London's Jubilee line underground extension went way over budget and the tax payer had to meet much of the cost because of the collapse of contractor Metronet. FireControl, a PFI to replace England's 46 emergency call centres with nine regional sites, had technical problems. This meant the scheme was cancelled and £342 million of taxpayers' money is committed to paying rent on eight empty sites that will never be used. Once a PFI contract is signed, it is almost impossible to get out of it except at enormous expense.

Other forms of government intervention in markets, for example deregulation in postal services and price capping in the water industry, might be more effective than PFI at promoting competition and economic efficiency.

(Sources: adapted from © The Financial Times Ltd, Nicholas Timmins, 7 August 2011 and © Guardian News and Media Ltd, Jamie Doward, 12 June 2011)

Extract 2 Healthcare suffers under PFI

Andrew Lansley, the government's Health Secretary, said he has been contacted by 22 health service trusts which claim their "clinical and financial stability" is being undermined by the costs of their PFI contracts. This includes National Health Service (NHS) trusts in London, such as South London Healthcare, Barking, and others including Oxford Radcliffe, Plymouth and North Bristol trusts. Between them the trusts run more than 60 hospitals which care for 12 million patients.

The total cost of the PFI schemes is often far more than the value of the assets. In one example, a hospital in Bromley, south east London, will cost the NHS £1.2 billion, more than 10 times what it is worth. As a result, Mr Lansley says, the 22 trusts "cannot afford" to pay for their schemes, which in total are worth more than £5.4 billion. The annual payments have risen sharply because PFI costs are linked to inflation. There are increasing demands on the health service while NHS budgets are strictly controlled.

Hospitals are having to make substantial cuts to pay the PFI costs. There is evidence that waiting lists for non-urgent operations have begun to rise as hospitals delay treatment to save money, and patient care has suffered. The NHS is abandoning its £12.7 billion computerised patient record and booking scheme project, the National Programme for IT.

Companies who run PFI schemes earn profit margins of up to 71% on the projects, in what some economists call an uncontestable market, once the contract is agreed. Now there is growing pressure from MPs and ministers to return some of their "supernormal profits" and renegotiate their PFI contracts.

(Source: adapted from © The Telegraph Media Limited Robert Winnett, 21 Sep 2011)

39 Discuss how PFI operators can earn *supernormal profits* (Extract 2, line 22). Use a monopoly diagram to support your answer.

(8)

(Total for Question 39 = 8 marks)

40 Brand loyalty in contrasting industries

Extract 1 Know your customers

Long before focus groups, marketing surveys or loyalty programmes, businesses knew their customers because they saw them face to face. The corner shop owner knew who liked a particular brand of jam and kept it in stock for them. He knew when people tended to come in and kept his shop open to accommodate them. Stuart Aitken, the chief executive of Dunnhumby, a leading force in the growing field of data analysis, says he keeps this vision in mind as he uses the latest technology to provide companies with insights about their customers. "This is back to basics," he says. "What we're seeing is that businesses have driven down costs, they've got economies of scale, but they've forgotten who their customer is. What we do is allow businesses to reconnect with their customers, to become the corner store on a large scale."

As data management becomes more sophisticated and gives clearer pictures of customer behaviour, it is increasingly useful for business decision-making. The pioneers have reaped tremendous rewards. Tesco depended so heavily on the customer profiles delivered by Dunnhumby that it ended up buying the company. Dunnhumby used the data collected by Tesco's Clubcard programme to build detailed customer profiles. It now has detailed knowledge of 80% of its 15 million customers. Dunnhumby's work is widely credited with helping Tesco open a wide lead over its UK supermarket rivals.

(Source: adapted from © The Financial Times Ltd, Philip Delves Broughton, 7 March 2011)

Extract 2 The hairdressing industry

70% of a hairdresser's customers can be described as fully loyal – customers who will continue to go to a particular stylist, even if there are cheaper or more convenient alternatives available. Research at the University of Melbourne in 2010 found that women are loyal to a particular stylist and, when a stylist leaves a salon, the customers are also likely to go elsewhere, creating problems for the business.

The research suggests that devising loyalty programmes, cutting prices or offering short-term financial inducements to customers may consequently be a waste of time. Customer loyalty is directly related to retaining employees says the research, something which is within the control of the service manager or owner. "Keep hold of your good staff and you are far more likely to prevent the customers you can't afford to lose from moving on," says Professor Lester Johnson.

(Source: adapted from © The Financial Times Ltd, Linda Anderson, 12 February 2010)

Figure 1 Four-firm concentration ratios in selected industries, 2011

Supermarkets	76.1%
Hairdressers*	Less than 5%

*excluding franchise

(Source: © The Press Association, Reproduced with Kind Permission)

40 In the light of the information provided in the first paragraph of Extract 2, assess the likely profitability of a firm in the hairdressing industry. Use diagrammatic analysis to support your answer.

(8)

(Total for Question 40 = 8 marks)

41 Food manufacturing and retailing

Extract 1 Northern Foods struggles to meet supermarket power

Food manufacturing is a brutal industry. A fresh burst of commodity inflation has raised input costs and the buying power of the big supermarkets makes it hard for food manufacturing firms to pass these extra costs on. The grocers' influence is a benefit to consumers: though dominated by a handful of big chains, Britain's retailing industry is competitive, and the margins squeezed from manufacturers are shared with shoppers. That buyer power is not such a blessing for suppliers, who struggle to hold on to any cost savings they make. Multinational firms, such as Nestlé or Unilever, possess the strength and the famous brands to fight back. Small suppliers seem powerless.

Northern Foods isn't small (it has almost 9,500 employees) and owns some sizeable brands, such as Fox's Biscuits; but the core of its business is supplying prepared foods to which supermarkets then attach their own labels. The firm led the way in chilled prepared meals, partnering with Marks & Spencer (M&S) in the 1980s. But as others caught up, Northern Foods found itself struggling against retailers who could quickly change suppliers if they wanted to pay less.

Northern Foods' response to its declining fortunes and slumping share price was to seek a merger. In November 2010 there was a proposed merger with Greencore, a Dublin-based food manufacturer. It would have yielded the merged company £40m a year, around 2% of joint sales, through cost and tax savings, and better terms with its own suppliers. Behind the push for a merger was a belief that a bigger, more diversified firm would not be so easily bullied by retailers.

Yet it is far from clear that Northern Foods' main problem is insufficient scale. Other food manufacturers have thrived despite pressures on profit margins. Cranswick, a supplier of upmarket pork products to supermarkets, has a bigger stockmarket value than Northern Foods' with less than half the staff. Its revenues and share price have grown quickly in the past decade, as have those of Kerry Group, an Irish firm supplying the upmarket City Kitchen line of prepared meals for Tesco. The firm works closely with retailers to provide good service and improved products and is very disciplined in controlling costs.

The key to a good bargaining position for food manufacturing firms, it seems, is to make it costly for retailers to change suppliers. The more reliable the supply, the better the goods and the more tailored the service, the harder it is for retailers to switch. This requires constant effort: a firm that stands still is a target for the cost-cutting chains.

(Source: adapted from © *The Economist* Newspaper, 10 February 2011)

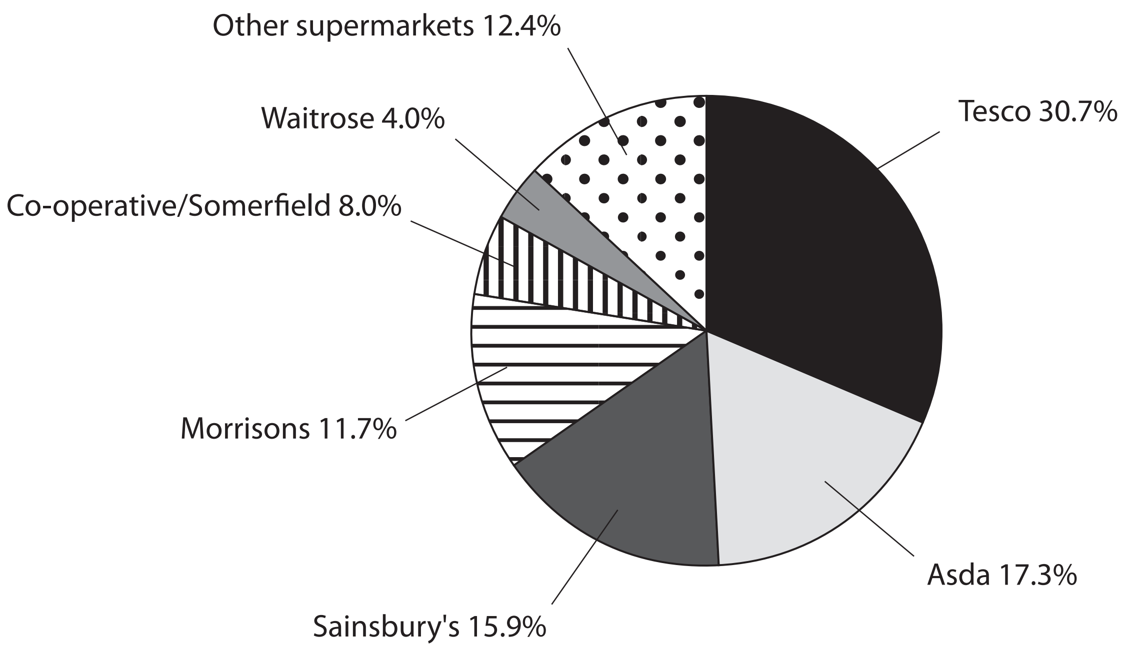
Extract 2 Tesco pushes into northern California

In 2007 Tesco began its move into the United States by opening a chain of small-format grocery stores on the West Coast of the United States (Arizona, California and Nevada) under the brand name Fresh & Easy. Tesco has now begun its expansion into northern California, with the opening of its first two stores in the San Francisco Bay area, indicating the continued expansion of its loss-making US venture under new group chief executive Philip Clarke. A further 10 standard stores are set to open by April 2011. Fresh & Easy, which has more than 160 stores, is to open about two stores a week this year. The initial planned capital expenditure was up to £250 million per year. One of the key decisions for Mr Clarke will be deciding whether to continue with the Fresh & Easy chain, which made a loss of £165m last year, but is expected to break even by 2013, and turn losses into profits by 2015.

Tesco is planning to extend Fresh & Easy into smaller sized stores with the aim of attracting customers from larger out of town stores owned by competitors. Opening the northern California stores demonstrates that Mr Clarke is pushing ahead with expansion, despite the highly unusual decision last October to close 13 loss-making stores, primarily in Arizona and Nevada. These states have been hit by the US housing market downturn, shrinking populations, the high percentage of house repossessions and high unemployment rates.

(Source: adapted from © The Financial Times Limited, 3 March 2011)

Figure 1 UK supermarket market shares by revenue, 2009



(Source: © Kantar Worldpanel)

Extract 3 Tesco's purchase of 77 One Stop stores angers rivals

One Stop, a chain of 598 convenience stores in the UK, was bought by Tesco in 2002 as part of its £377m acquisition of T&S Stores. Tesco has been forced to defend itself against allegations of high prices – despite its general claims that its huge scale means consumers benefit from the retailer offering the same prices nationwide. A spokesperson for Tesco said "The ranges are quite different in One Stop. It is a separate business with a different supply chain and a separate business model with stores that are typically smaller than those running under the Tesco Express name". In clearing the original merger, the OFT said "Tesco has said that the transaction will bring consumer benefits as its Express store prices are lower than those of One Stop." There are currently 1,183 Tesco Express stores, and Tesco controls 3.5% of the convenience store market. Tesco is the world's third largest retailer by revenue, after Walmart and Carrefour, and the second largest after Walmart by profit.

(Source: adapted from © Guardian News & Media Ltd 2010 16 December 2010)

41 Using an appropriate diagram, discuss **one** reason why new 'Fresh & Easy' stores set up in the United States are likely to 'turn losses into profits by 2015' (Extract 2 line 11).

(8)

(Total for Question 41 = 8 marks)

42 A crowded car industry

Figure 1 US car market, % market share 2010

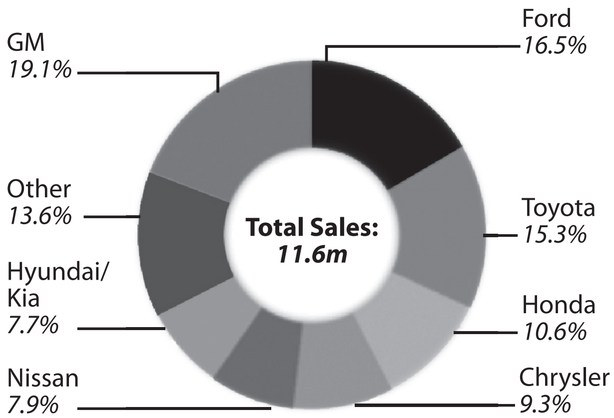
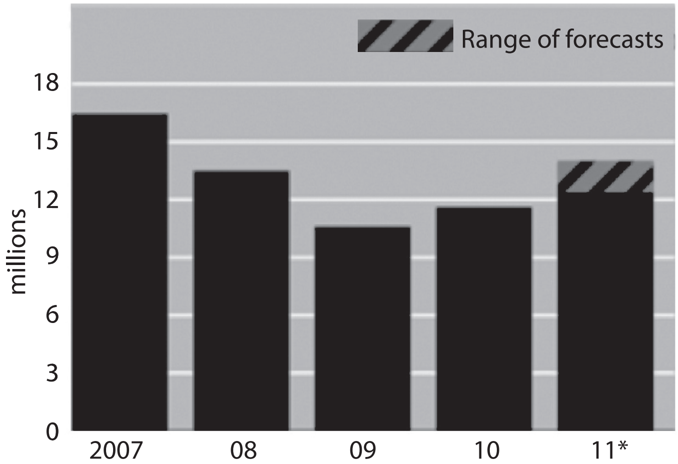


Figure 2 US car market, units sold (millions)



Extract 1 United States carmakers are back. Tough competition is waiting for them

Every year at the Detroit Motor Show there is a major display used by the main manufacturers of cars to bring new models to the US market. For the past two years it been a dismal affair, but this year the parties were in full swing again. Helped by government bail-outs and with debt burdens lightened by bankruptcy, Chrysler and General Motors (GM) are back on their feet. Ford, the other member of Detroit's Big Three, is thriving.

The biggest impact on the opening day was made by a Volkswagen saloon, which is to be built in a new factory in Tennessee. This is causing some concern for local manufacturers. Europe's market-leading carmaker is taking aim at the heart of the American market for the first time in over 20 years. Its bold move is just one sign of breakup in a market once dominated by the Big Three and a small collection of Japanese rivals.

The recession sent car sales in America falling from 16.5 million in 2007 to just over 10 million in 2009 (see Figure 2). Since then, sales have risen. Sales in December 2010 were equivalent to an annual rate of 12.7 million cars, the best performance since 2008, with a predicted 10% rise in 2011. Analysts point to an improvement in the creditworthiness of buyers which increases the willingness of banks to lend. Americans are buying big, expensive vehicles again.

The 2008 crash allowed Chrysler, GM and Ford to strengthen management and push through changes that had long been blocked by unions. Capacity was cut drastically: Ford closed 17 factories and reduced employee numbers by over 40%. GM abandoned brands such as Hummer and Saturn to focus on Chevrolet, Buick and Cadillac, while Ford got rid of all brands except Ford and Lincoln. Health care for company pensioners, for a long time a problem for the firms' owners, was transferred to union-run trusts. New workers can now be hired at lower rates of pay than those forced up by the United Auto Workers (Union) during the boom years. Ford's chief executive says his company can compete on price with factories opened in weakly unionised southern states by Japanese, South Korean and German carmakers. Ford may have made as much as $10 billion in profit last year.

For the Big Three now read the Magnificent Seven. Toyota, Honda and Nissan have been joined by Hyundai and its sister brand Kia in a fragmented market where seven manufacturers each have more than 5% of the market (see chart). And Volkswagen is trying to join the club. Volkswagen and its Audi offshoot sold 358,500 cars in the United States last year. The firm aims to triple sales by 2018 and plans to spend $3 billion on marketing and opening more dealerships.

Competition is particularly fierce in the “mid-range” market, where Toyota’s Camry, Nissan’s Altima and Honda’s Accord have long dominated. Since petrol prices first rose above $3 a gallon in 2005 Detroit has been trying to reconquer the mid-range car market instead of relying on sales of expensive gas-guzzlers. Ford is bringing in slightly Americanised versions of saloon cars that have been successful in Europe, while GM plans to do the same with versions of its German-designed Opels. Chrysler will import Italian technology from Fiat as the ties between the two companies strengthen.

They will face an old adversary. Quality problems at Toyota led to $48.8m in government fines and a recall of 4 million vehicles in America alone. Toyota’s embattled chief executive, Akio Toyoda, making his first visit to the Detroit show, admitted that the firm “did receive damage”. But it would be foolish to underestimate the ability of the world’s biggest carmaker to put its house in order: it still has the most efficient system for product development and manufacturing, even if it must focus for the moment on quality control. For the first time it is offering customers discounts to increase sales.

The Japanese firm could learn a good deal from Hyundai and Kia. The South Korean firms suffered from reputations for poor quality when they entered the American market and relied largely on bargain prices to sell their vehicles. Under pressure from consumer magazines they gradually improved their quality and have won recognition from critics and customers. That jump in quality, as well as heavy marketing, has turned them into serious competitors. A glimpse of the next challenger came from BYD, a Chinese car manufacturer, which showed off an innovative, compact battery-powered car.

(Source for Figures and Extract: © *The Economist* Newspaper, *The Economist*, 13 Jan 2011)

42 Using an appropriate diagram, discuss **one** reason why General Motors and Ford have been able to turn losses in 2008 to profits in 2010.

(8)

(Total for Question 42 = 8 marks)

43 The UK Banking Sector

Extract 1 RBS fined £28 million for sharing price data

Royal Bank of Scotland (RBS) was fined £28.6 million in March 2010 for breaking competition law in the first big case brought against a financial services company, and one of the largest against a company for anti-competitive behaviour. RBS admitted that staff involved in making loans to big law and accounting firms had illegally given pricing data to corresponding staff at Barclays. Barclays had used the information provided by RBS to determine the pricing on its own loans before it reported the lawbreaking to the authorities in 2008. RBS had provided Barclays with broad information about the loan market, as well as specific details of the proposed pricing structure for two new loan facilities. These disclosures took place at a number of social, client and industry events and through telephone conversations between October 2007 and March 2008.

The breach in competition laws occurred before RBS was bailed out by the government, and it is now 70% owned by taxpayers. RBS said yesterday that it was a "deeply regrettable and isolated case".

No action is to be taken against Barclays, as a reward for having acted as an informant within the industry, voluntarily disclosing its part in the affair to the competition authorities.

(Source: © The Financial Times Limited 2010, adapted from 'RBS fined £28 million for price sharing data', by Michael Peel and Sharlene Goff)

Extract 2 Fresh bonus fears as bank profits rise

The UK's five biggest banks – HSBC, Barclays, Lloyds Banking Group, Royal Bank of Scotland and Standard Chartered – have revealed that they made combined profits of £8.4bn in the first half of 2010. This performance is likely to be taken as proof that UK banks have recovered from the credit crisis and benefited from staffing reductions. However, there are concerns that these higher profits will lead to executives claiming greatly increased pay packages. The banks' share prices have jumped this year – RBS is up more than 70%, Lloyds is up nearly 37% – which could trigger the end-of-year bonuses to senior banking staff. Barclays is expected to disclose a bonus-to-salary ratio in line with the 38% paid last year – the highest of the UK banks.

Under pressure from the Bank of England and the Financial Services Authority, banks last year cut dividends and reduced bonuses as a proportion of revenue. The Chancellor said "we will not tolerate banks piling the pressure on the small to medium-sized business sector. The banks have an economic obligation to assist that sector. Every small and medium-sized company that I have visited in recent weeks has had some problem with their bank – either they have found it difficult to renew their overdraft or the bank demanded additional collateral, often someone's house. The danger is, particularly next year when there is a huge amount of refinancing required, that small and medium-sized businesses will suffer from a lack of access to short term loans."

(Source: © copyright Telegraph Media Group Limited, 31st July 2010)

Extract 3 Other views on bank bonuses

The Deputy Prime Minister, Nick Clegg, said last week that the Government will "not stand idly by" if bonuses are too high. This needs to be more than just words. Ministers need to prevent the payouts being made, or at the very least ensure that awards are made entirely in shares (which will have the effect of increasing the capital reserves of banks), rather than cash. And those banks that still insist on resisting ministerial pressure must face a further tax as punishment.

(Source: © *Independent*, www.independent.co.uk/opinion/leading-articles/leading-article-time-for-ministers-to-call-the-banks-bluff-2165552.html, 21st December 2010)

43 Using an appropriate cost and revenue diagram, assess **one** likely reason why banks' profits rose in the UK in 2010 (Extract 2 paragraph 1).

(8)

(Total for Question 43 = 8 marks)

44 Chocolate Manufacturing and Retailing

Extract 1 Profits rise at Thorntons

Mike Davies, Thorntons' chief executive of the UK's remaining large chocolate manufacturer, reported 25% higher profit, despite a small fall in total sales. As well as from its own shops, Thorntons sells chocolates through its website and to other retailers, such as supermarkets. Sales to other retailers rose by 6.5% to £34.6 million in the 26 weeks to 9 January 2010. In boxed chocolate, Thorntons' sales have grown 82% in the past two years, compared with a 7% decline recorded by Cadbury.

The company hopes that a new range of products will help it to become profitable in the second half of the year, which includes the summer months. Thorntons usually records a loss in the second half of the year, because customers eat less chocolate in warmer weather.

Source: http://business.timesonline.co.uk/tol/business/industry_sectors/retailing/article7031407.ece
The Times February 18, 2010 'Thorntons plays hard ball on the high street as profits rise' Marcus Leroux

Extract 2 Kraft takes over Cadbury to become world's biggest confectioner

Kraft's offer to buy Cadbury was accepted by Cadbury's board on 19 January 2010. Kraft, the US food giant, will pay £11.7 billion for Cadbury in cash and shares, some 50% more than the firm's value before the bidding started in September.

Kraft's acquisition may be a good deal for both companies. Kraft has little presence in Britain's confectionery market, where Cadbury is strong, but it has thriving businesses in mainland Europe and Russia where Cadbury has made minimal progress. Cadbury is strong in India and various Commonwealth countries, and has a booming chewing-gum business, particularly in Europe and Latin America, an area where Kraft has little expertise. Between them they can make up lost ground in China, where Mars holds the upper hand. The deal is also set to yield cost savings of £414m a year for the combined firm, operating at a larger scale in emerging markets. This is a good deal for most Cadbury's workers. However, the fact that so much of the deal is financed by debt is a negative: borrowing that looks cheap today could double in price tomorrow. That would eat up the cost savings on marketing and administration already factored into the purchase price, and perhaps force undesirable cuts to operations. Cadbury is already efficient: under its current management it has reduced costs significantly, for example, by off-shoring more of its operations.

Three-quarters of mergers result in a fall in short run profits. In such a sensitive consumer sector, the risks of a culture clash and brand destruction are high. That is what happened to Terry's, a smaller York-based chocolate company bought by Kraft in 1993. Terry's has lost visibility in Britain since production was relocated to central Europe in 2005. The same problem could await Cadbury.

There are understandable fears that foreign owners will be more likely than domestic ones to axe British jobs or use British profits to pay off their global debts. But all successful big firms, British and foreign alike, respond to the demands and opportunities of the global marketplace these days, and, as Cadbury's current managers have shown, their behaviour is rarely determined by their nationality.

The management practices of multinational companies tend to be better than the average in any country they operate in. In theory, then, Kraft's takeover of a British firm should bring better management to Britain. One problem: Cadbury is itself a multinational, and in no need of lessons from Kraft.

Source: adapted from http://bit.ly/89Azni
'Cadbury goes American. Is this healthy for British manufacturing? ' *The Economist* Jan 19th 2010 and http://bit.ly/aaFiRe Jan 21st 2010 'Manufacturing blues: Another one bites the dust' Jan 21st 2010

Extract 3 Kraft to close Cadbury plant it offered to keep open

Kraft Foods has gone back on its promise to keep open a Cadbury factory in Somerdale near Bristol, just weeks after the British chocolate maker accepted its £11.7 billion offer. The plant, which employs 400 staff, will be closed in 2011. The Unite union said: "This sends the worst possible message to the 6,000 other Cadbury workers in the UK and Ireland. It tells them that Kraft cares little for their workers."

Source: http://www.telegraph.co.uk/finance/newsbysector/retailandconsumer/7199322/Kraft-to-close-Cadbury-plant-it-offered-to-keep-open.html Amy Wilson and Jonathan Russell 09 Feb 2010

44 Using an appropriate cost and revenue diagram, show why 'Thorntons usually records a loss in the second half of the year' (Extract 1, lines 8–9).

(4)

....

....

....

....

....

....

....

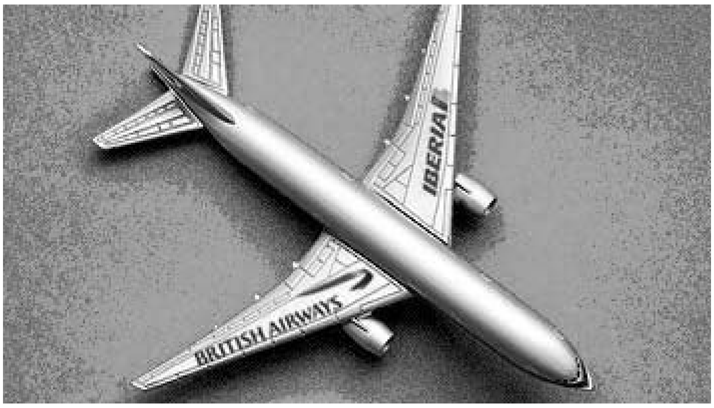
....

....

(Total for Question 44 = 4 marks)

45 Iberia and BA merger

Extract 1 Uniting in the sky – Iberia and BA at last agree to get together to sort out their problems



Like two drowning men, Iberia and British Airways (BA) have long seen each other as potential means of staying afloat. The rate at which the airlines have been sinking at last forced them into each other's arms on November 12th 2009, when a merger was agreed. BA made big pre-tax losses in the year to the end of March as it suffered from the credit crisis and the global economic slump. Iberia actually managed a small profit in 2008. Just as the terms of the merger were agreed Iberia announced a loss in the latest quarter, which includes the usually profitable summer months. BA said that it had lost £292m in the first half of the year, which includes the summer period.

These airlines are not alone in their concerns. The total losses for the world's airlines this year are estimated to be £17.6 billion. By agreeing to merge, the two firms will join the trend for big European airlines to get bigger. This has become an attractive means to make substantial cost savings as they compete against low-cost rivals and try to cope with a dramatic fall in numbers of the profit-making business passengers. The two companies estimate that within five years the new group will save some £429m a year by cutting overlapping routes, and by combining maintenance, office functions and business-class lounges. They may also have more buying power when it comes to negotiations to buy new planes from Boeing and Airbus.

The deal will put the firms back into the big leagues of European aviation. Their combined revenues will put them closer to Air France-KLM, the product of a similar deal in 2004 and Germany's Lufthansa, which has expanded its operations with a series of smaller takeovers of Swiss and Austrian airlines since 2005. Iberia and BA will combine their businesses but maintain separate corporate operations. This will allow them to maintain their roles as the national flag-carriers in Spain and the UK while keeping valuable bilateral international landing rights that go along with that status.

One reason for keeping pace with European rivals is that size will become an important factor if consolidation among airlines goes global. The two airlines are already seeking permission from the competition authorities in America and in Europe for an agreement with American Airlines, which would see all three co-ordinating over costs and revenues on transatlantic routes. However, BA may be required to give up landing slots at Heathrow, a price it has been unwilling to pay in the past.

A protectionist stance in America over the country's troubled airlines has kept a law in place that prevents foreign airlines from owning more than 25% of an American rival. The European Union is pressing for this restriction to be lifted, though there is little sign that it might happen soon.

Source: adapted from Economist.com *'Uniting the Sky'* Nov 13th 2009,
http://www.economist.com/businessfinance/PrinterFriendly.cfm?story_id=14887815.

Extract 2 Strike action in response to BA crew reductions and cost cuts

British Airways was preparing for what could be a damaging strike after workers voted to walk out for nearly two weeks. The airline plans to reduce generous staff levels and benefits for Heathrow-based cabin crew.

The union said 80 per cent of its more than 12,000 BA members had voted, recording a 92.5 per cent vote in favour of a strike. The airline has said the move would cause chaos for hundreds of thousands of passengers.

"We're hoping that the size of this vote will make the company think again," said a spokesperson for the union, who added that it would not back down unless BA gave way on the crew reductions that prompted the strike.

Source: http://www.ft.com/cms/s/0/75a53942-e8aa-11de-9c1f-00144feab49a.html.

45 Examine the likely reasons why Iberia made a loss during 'the usually profitable summer months', (Extract 1, line 7). Use a diagram to support your answer.

(8)

(Total for Question 45 = 8 marks)

46 Newspapers online

Extract 1 Did you pay to read this?

Until recently, there were two types of newspaper website: those that made you pay to read many of the articles (*The New York Times*, *The Wall Street Journal* and the *Financial Times*) and those that didn't.

That is changing. *The New York Times* has announced that almost all its online material would now be free. FT.com has moved to a system of free access for occasional visitors. The theory is that increased advertising revenue will replace subscription revenue. Online advertisers are charged only 20% of the print edition equivalent, and the placing of adverts is tailored to readers' profiles.

The big question is whether online advertising makes more money than subscriptions. Research by the University of Chicago Business School on what the profit-maximising price would have been for online access suggests that washingtonpost.com would probably have made more money by charging a few dollars a month back in 2001 or 2002, when it offered free access. But by 2004, as the online advertising market improved, charging for access no longer increased total revenues.

Source: adapted from FT.com 20 October 2007 *Undercover Economist: Did you pay to read this?* Tim Harford.

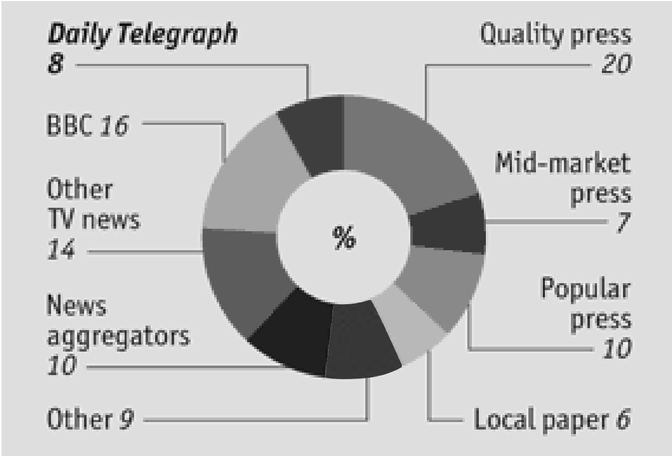
Extract 2 More bad news for the newspaper business

The decision to give away newspaper content free online is increasingly viewed as one of the world's worst-ever business decisions. But any newspaper firm which wants to undo this error has a problem. If one newspaper starts charging, readers may migrate to those that remain free. If, on the other hand, a lot of papers begin charging at the same time, readers might be pushed into paying. This plan has always seemed optimistic. A study released this week suggests it may be completely wrong.

Oliver & Ohlbaum, a media consultancy, asked people what newspaper they tended to read and whether they subscribed to it (most get their papers from shops). Then they asked readers about where they went for news on the internet. The results were consistent: when it comes to online news, Britons are shamelessly disloyal.

The theory underlying most papers' online strategies is that people will buy a favourite newspaper and then go to its website for breaking news and extras such as blogs. But fans of the *Daily Telegraph*, for example, the most popular quality daily paper, got just 8% of their online news from its website (see Figure 1). They spent twice as much time visiting the BBC's news website and more than twice as much reading other quality papers.

Figure 1 Percentage of time spent reading online news sources by *Daily Telegraph* readers



Source: Oliver & Ohlbaum Trends November 2009, used in *The Economist*, 3 December 2009.

The survey also contained bad news for those publishers hoping to co-ordinate attempts to charge. When *Guardian* readers were asked whether they would pay £2 a month to read their favourite paper online, 26% said yes. But what if all newspapers charged? The proportion prepared to pay for the *Guardian* might have been expected to rise. Instead it fell to 16%. This seems odd, until one considers readers' disloyalty. Readers protested at the prospect of having to pay repeatedly to continue to access a wide variety of news sources. The questions are hypothetical, and people may react differently if and when charges for online news are introduced. However, this survey will hardly encourage newspaper owners to charge for online services.

Source: adapted from *The Economist* print edition 'The promiscuity problem', 3 December 2009.

Figure 2 Newspaper sales (hard copy) circulation, daily

Title	2001	2005	2009
The Financial Times	478 161	422 519	426 676
The Telegraph	1 022 263	920 745	783 210
The Times	734 220	686 327	617 483
The Sun	3 636 561	3 382 509	3 146 006
Total of all daily newspapers (rounded)	15 500 000	13 300 000	13 000 000

Source: Audit Bureau of Circulations http://www.abc.org.uk/
accessed via http://en.wikipedia.org/wiki/List_of_newspapers_in_the_United_Kingdom_by_circulation#Circulation_1950.E2.80.931999.

(a) Explain **one** possible reason for the trend in newspaper sales as shown in Figure 2.

(4)

(b) Assess the possibility of some printed newspapers shutting down as a result of the trend in newspaper sales.

(8)

(Total for Question 46 = 12 marks)

47 The German Electricity Market

Extract 1 Electricity prices in Germany

On 22 April 2009, just days after Germany's competition regulator said it had started an investigation into electricity generating companies, RWE, Germany's second largest electricity generating company, predicted that its profits are likely to go up in 2010 and 2011. The regulator is trying to work out why energy prices in Germany are high, and in some cases rising, even though oil and gas prices have fallen sharply. It suspects electricity generating companies may have been keeping prices artificially high by, for instance, shutting power stations simultaneously to limit supplies. Finding evidence of anti-competitive behaviour may be difficult, and proving it even more so. However, it will be clear to the regulator that Germany's electricity market is not working efficiently. An attempt to liberalise the market over the past decade seems only to have worsened many of its problems.

The first sign that the market is not working is in Germany's electricity prices, which are among the highest in Europe, even though it has an abundance of cheap coal. Moreover, Germany's electricity prices have remained persistently high even at a time when they would be expected to fall. Analysts at Credit Suisse, an investment bank, estimate that the slowing economy should reduce electricity demand by about 5%. Coal prices have dropped by 50% from 2008. Yet there is little sign that either falling demand or lower input costs are leading to cheaper electricity.

The main reason Germany's electricity market is not working well is the lack of competition. The biggest four electricity generating companies in Germany produce more than 80% of its electricity. The top two, E.ON and RWE, produce more than 60%. Liberalisation has, if anything, reduced competition. Germany had eight big generating companies in 1997, but that number has since fallen to four because of mergers and acquisitions.

A second problem is that Germany's biggest electricity generating companies also own the networks that distribute electricity. Critics argue that this gives them a huge advantage over smaller electricity generating companies, which may struggle to gain fair access to the networks or market information.

Change is, however, coming for two reasons. The first is that regulators in Germany have come to realise that the electricity market is not competitive. They have the power to impose very heavy fines for anti-competitive practices. The European Commission is also having some success in forcing firms to sell off their distribution networks. For example, at the end of 2008, E.ON agreed to sell its long-distance distribution network after being investigated by the European Commission.

Over the long run, there are ambitious plans to increase the share of electricity from renewable sources, which have high start-up costs. This may reduce the dominance of the country's four biggest electricity generating companies. Germany hopes to get as much as 30% of its electricity from renewable sources by 2020. However, despite increased competition from renewable energy providers, Germany's electricity prices are likely to keep on rising.

Source: The Economist, 25 April 2009 'Power to the people (at a price)'

47 With reference to the last two paragraphs, evaluate the factors which might reduce the profits of Germany's electricity generating companies.

(16)

(Total for Question 47 = 16 marks)

48 The market for instant coffee

Figure 1: UK Instant coffee market shares, 2007–8

Coffee brand	**Market share (%)**
Nescafé	**51**
of which Nescafé original	25
Nescafé Gold Blend	13
other Nescafé	10
Nescafé Decaffeinated	3
Kenco	**17**
of which other Kenco	6
Kenco Really Smooth	4
Kenco Really Rich	4
Kenco Decaffeinated	3
Douwe Egberts	**5**
Carte Noire	**3**
Others (including supermarket own label brands)	**24**

Source: http://www.brandrepublic.com/InDepth/Features/790070-Insight-Coffee---Inst

Extract 1 Changing Tastes

The rise of the coffee shop has brought urban café culture to the UK. While consumers are connoisseurs of brewed and filter coffee on the high street, they are, however, opting for convenience at home, where instant coffee still dominates.

Amongst instant coffees, there is a growing willingness among consumers to trade up to premium and speciality varieties. Growing awareness of health, wellbeing and ethical trading are also affecting consumers' purchasing decisions, and, therefore, the market.

Instant coffee accounts for more than 80% of the total UK market for coffee. Nescafé leads the field, and last year announced a £17 million promotional investment in its instant range.

Source: Ahttp://www.brandrepublic.com/InDepth/Features/790070-Insight-Coffee---Inst

Extract 2 Can instant coffee give Starbucks a boost?

In the US, instant coffee is regarded as being cheap and tasteless. The global instant coffee market is worth $17.7 billion, just $700 million of which is sold in America. Instead, Americans drink brewed and filter coffee – 65 billion cups of it a year.

Starbucks, best known as 'the home of the $4 latte', is gambling its luxury image by entering the instant coffee market with a new brand called Via, which can be sold through supermarkets and other outlets. At first, Via will come in packets of twelve individual servings, costing less than $1 per cup. This is much more than other instant coffees, but much less than a cup of coffee at one of Starbucks' cafés. As John Quelch, a Harvard Business school professor said: "Instant, soluble coffee has long been an unspeakable wasteland. Conventional wisdom would be that no premium brand should go near it".

But Howard Shultz, the chief executive of Starbucks, believes that with a superior instant coffee, he can take a share of the consumers who currently drink brewed and filter coffee at home. Starbucks says it has patents that should prevent competitors from quickly copying Via, which will go on sale in the US in June 2009. The opportunity may, however, be biggest in other countries: in the UK over 80% of the coffee sold is instant, compared with just 10% in America.

Mr Shultz insisted that the Via instant coffee brand was an innovation Starbucks had been working on for almost 20 years. It was just fortunate that the creation was perfected in time for the economic downturn. However, Starbucks also faces increased competition. For example, McDonald's is heavily promoting its McCafé espresso-based drinks.

(Source: Adapted from *The Times Online*, 17 February 2009 (http://business.timesonline.co.uk/tol/business/industry) and *The Economist*, 21st February 2009.

48 Assess the likely reasons why Starbucks is charging a lower price for Via instant coffee than for filter coffee sold in its cafés.

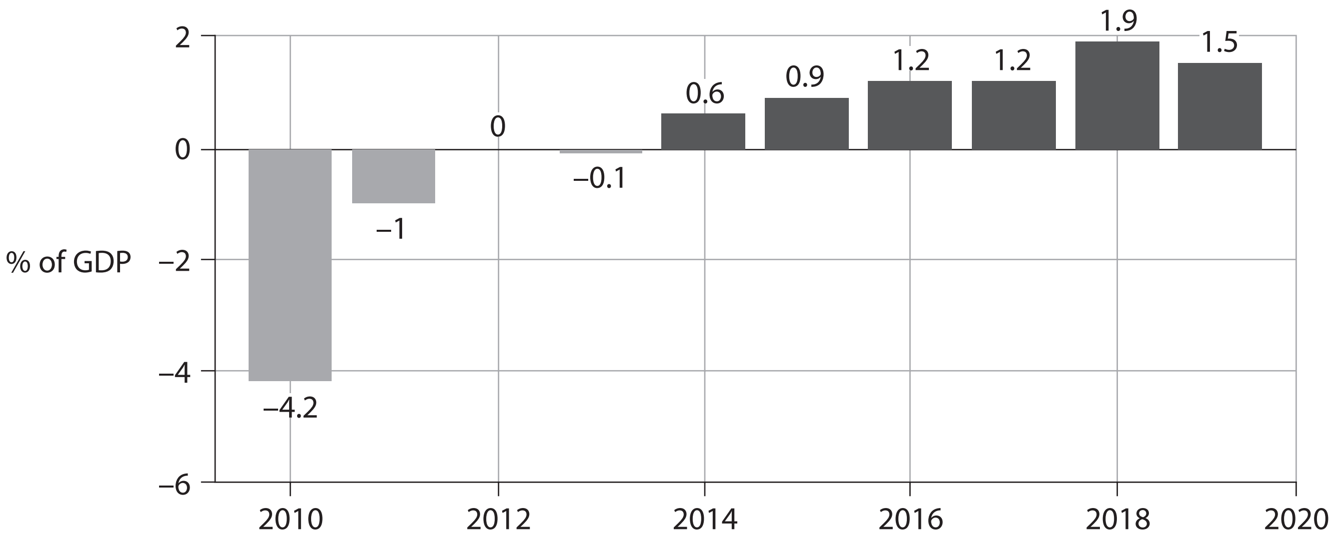
(12)

(Total for Question 48 = 12 marks)

Question 49

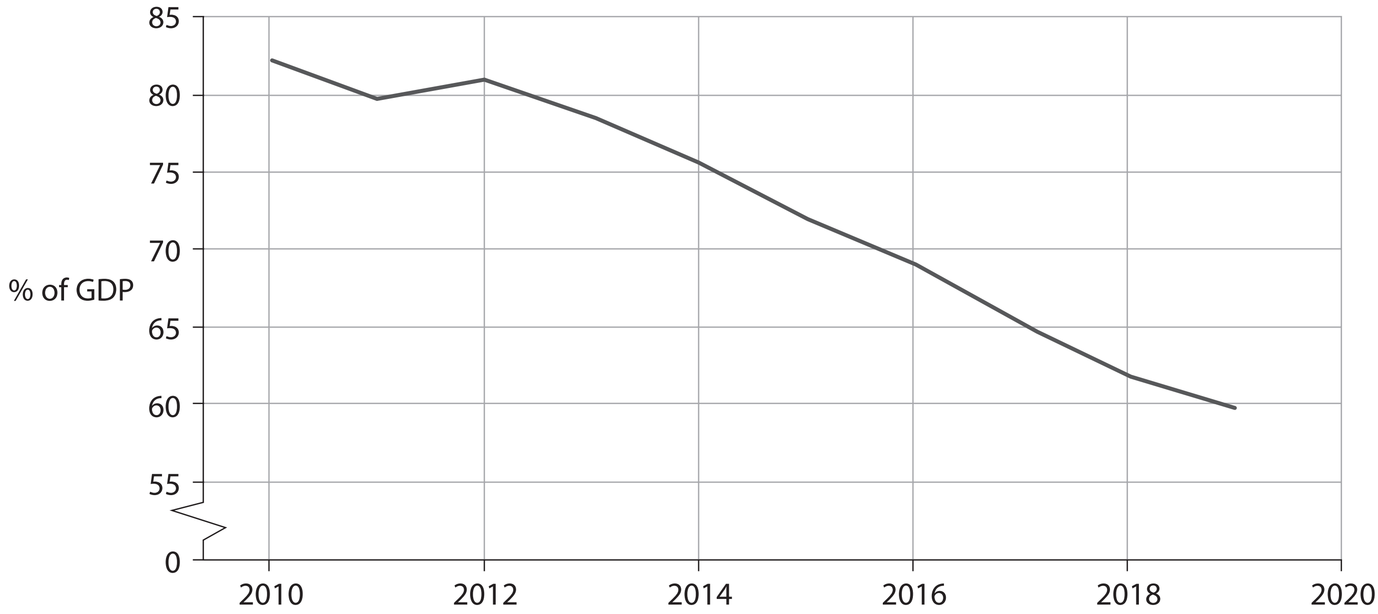
The German economy

Figure 1: German government budget balance, percentage of GDP, 2010 to 2019



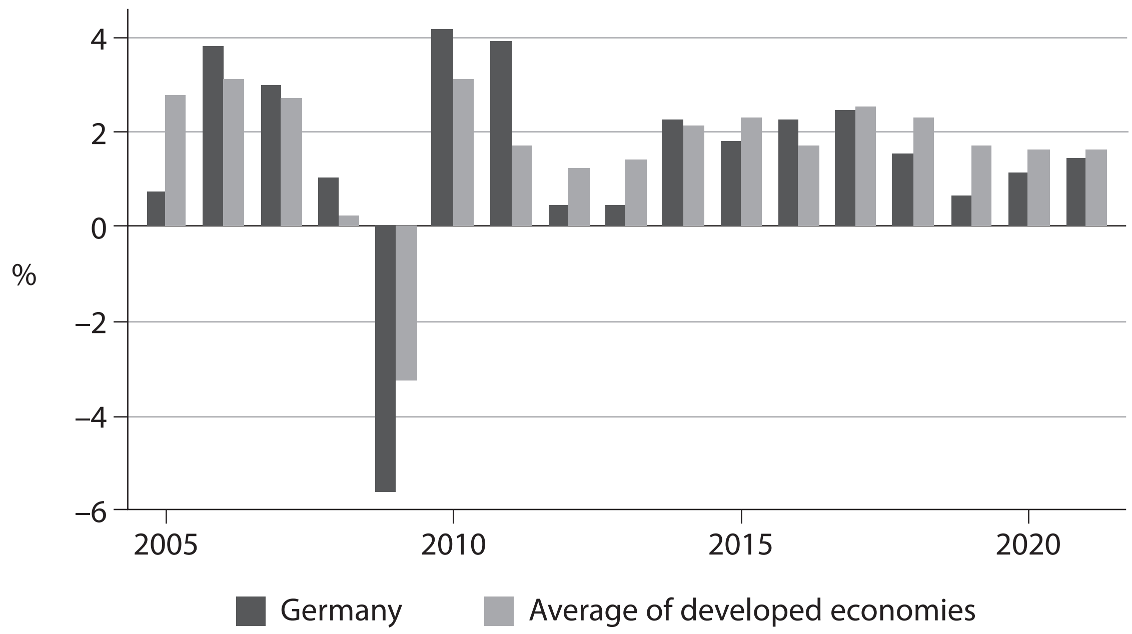
(Source adapted from: The Economist Nov 14th 2019)

Figure 2: German national debt, percentage of GDP, 2010 to 2019



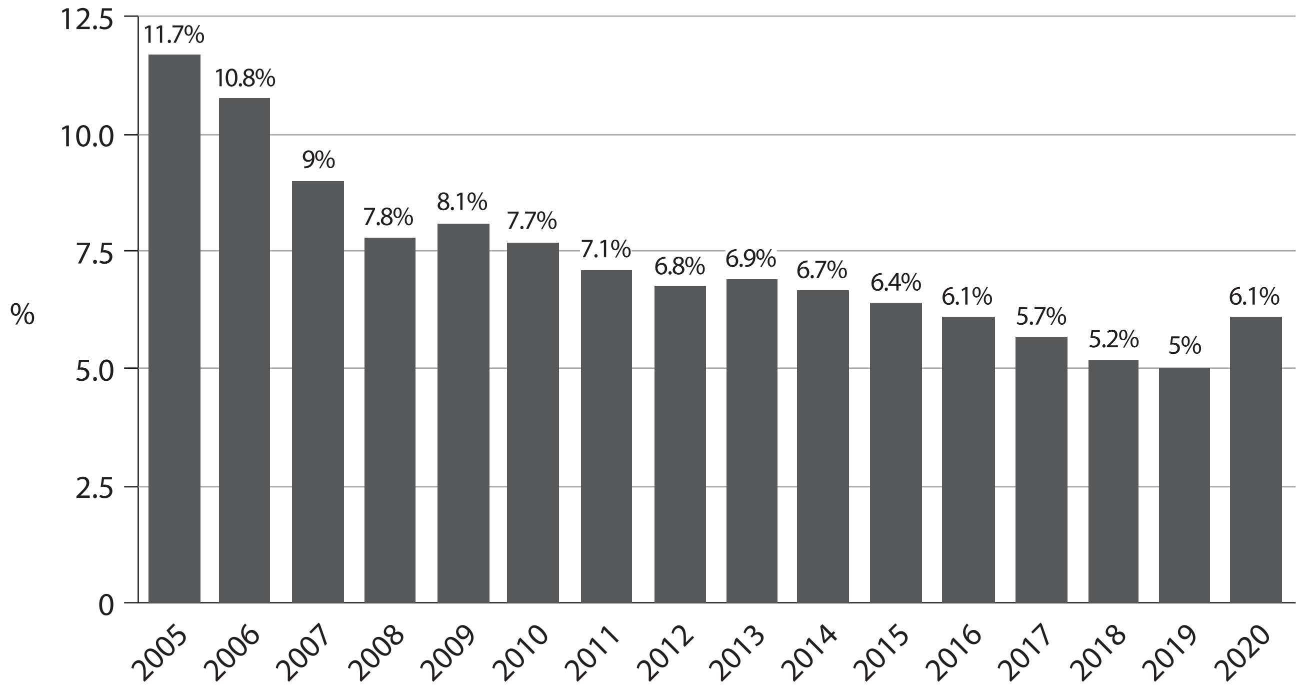
(Source adapted from: The Economist Nov 14th 2019)

Figure 3: Annual percentage change in real GDP, Germany and average of developed economies, 2005 to 2021 (forecasted data for 2020 and 2021)



(Source adapted from: IMF and German Federal Statistical Office)

Figure 4: Unemployment rate in Germany, percentage of labour force, 2005 to 2020 (2020 figure is forecasted)



(Source adapted from: bundesagentur für arbeit.de and https://www.ft.com/content/5486b247-c73e-4887-a2b2-528b23e301a6)

Extract C

Why Germany keeps to budget rules despite a slowdown in growth

Germany's economic boom is over, as it has entered recession. During the last ten years of economic growth well over 4 million jobs were created.

The fear of recession has revived a debate in Germany: should the government spend more to stimulate growth? It is written into the German constitution that the fiscal deficit cannot be greater than 0.35% of GDP, once the effects of the economic cycle have been removed. Germany's budget has been in surplus since 2014 and the government is always reluctant to increase spending which would create a deficit. In 2018, aided by booming employment and low interest costs on existing debt, the budget ran to a surplus 1.9% of GDP.

Germany's main trading partners have long been angered by German fiscal policy. The French President criticised Germany's budget and current account surpluses that "always occur at the expense of others".

Large parts of Germany's infrastructure need significant investment. As the economy has slowed, a decision to run a balanced-budget policy has become harder to defend. In wealthy regions of Germany, crumbling schools have been closed for fear of collapse, and information and mobile technology on a wide scale needs to be modernised. The World Economic Forum reported that accessibility of fibre optic broadband also "remains the privilege of the few". However, private sector firms, such as major motor manufacturers, are still willing to invest in new technology and the profitability of some of these firms, in the long run, benefits as a result.

The state development bank puts Germany's investment shortfall at €138 billion (£120 billion). Arguments for a much more expansionary fiscal policy have failed to influence government policy. Big government programmes, such as a recent package to reduce Germany's carbon emissions, are only implemented when they satisfy fiscal rules.

(Source adapted from: The Economist Nov 14th 2019
and https://www.ft.com/content/3cec4908-d164-11e9-8367-807ebd53ab77 7th September 2019
and https://www.ft.com/content/198f072e-4e42-11ea-95a0-43d18ec715f5 and
https://www.ft.com/content/d89d9404-c586-11e9-a8e9-296ca66511c9 and
https://www.ft.com/content/8f87c03c-93dc-11e8-b67b-b8205561c3fe)

Extract D

Germany drops to number 7 in the Global Competitiveness Index

Despite being the largest economy in the European Union, Germany's competitiveness is declining, according to the World Economic Forum (WEF). Germany dropped four places in the WEF's Global Competitiveness Index, coming in as the seventh-most competitive economy. Out of the 103 indicators used in the report, Germany received lower scores in 53 areas in 2019.

(Source: https://www.dw.com/en/germany-falls-in-global-competitiveness-ranking/a-50745071 8 October 2019)

49 Discuss the likely impact of investment in new technology on the profitability of firms in Germany, as described in Extract C line 20. Use a cost and revenue diagram to support your answer.

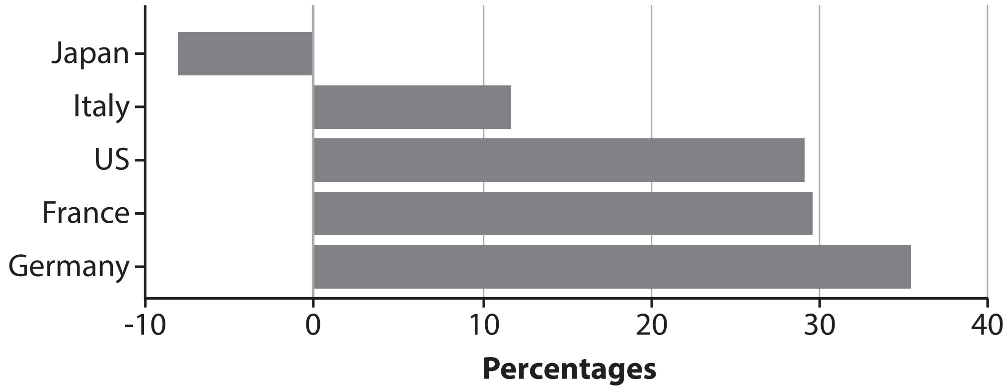
(12)

(Total for Question 49 = 12 marks)

Question 50

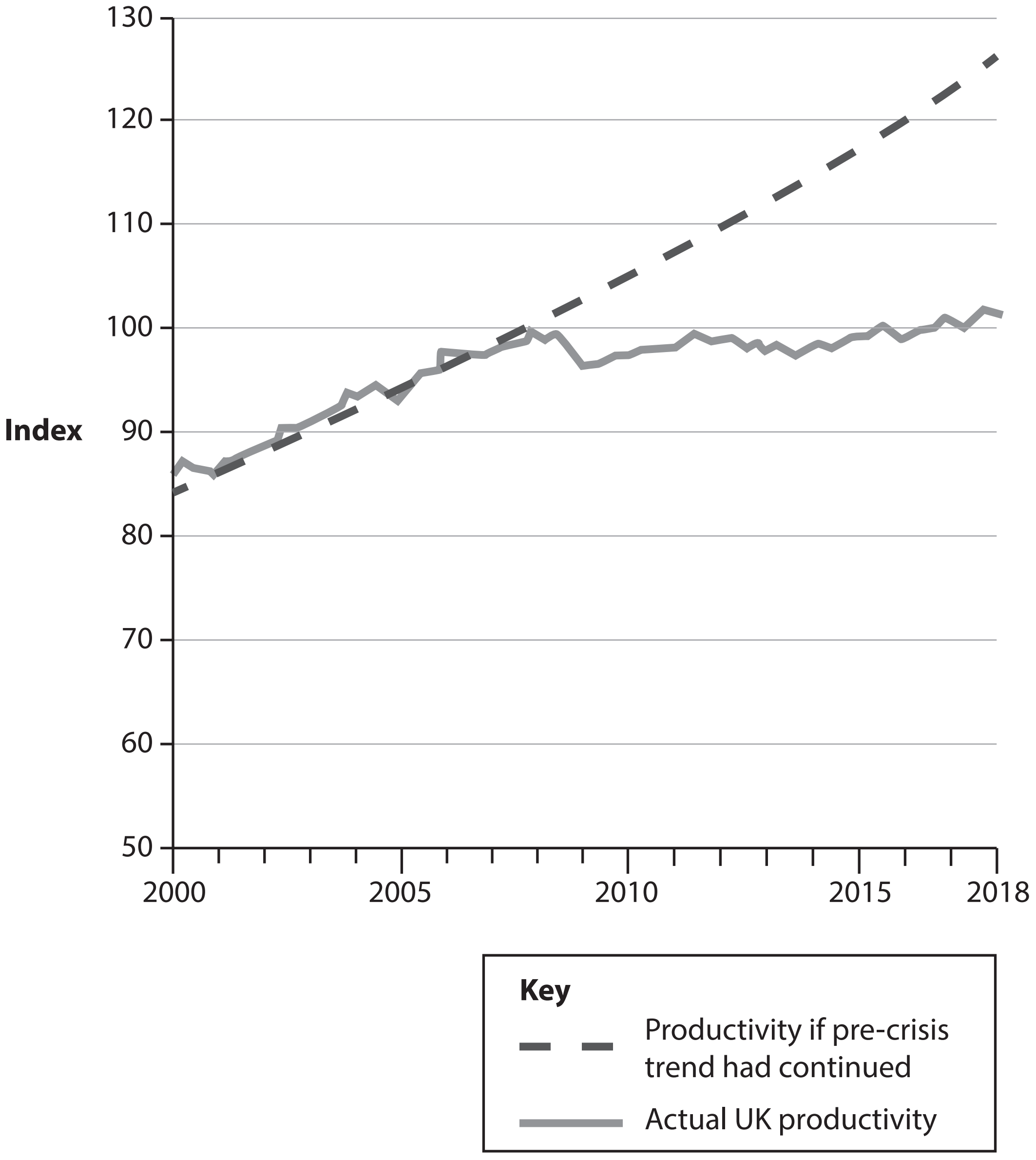
The UK economy

Figure 3: GDP per hour worked, nominal values at PPPs, percentage above or below UK level, 2018



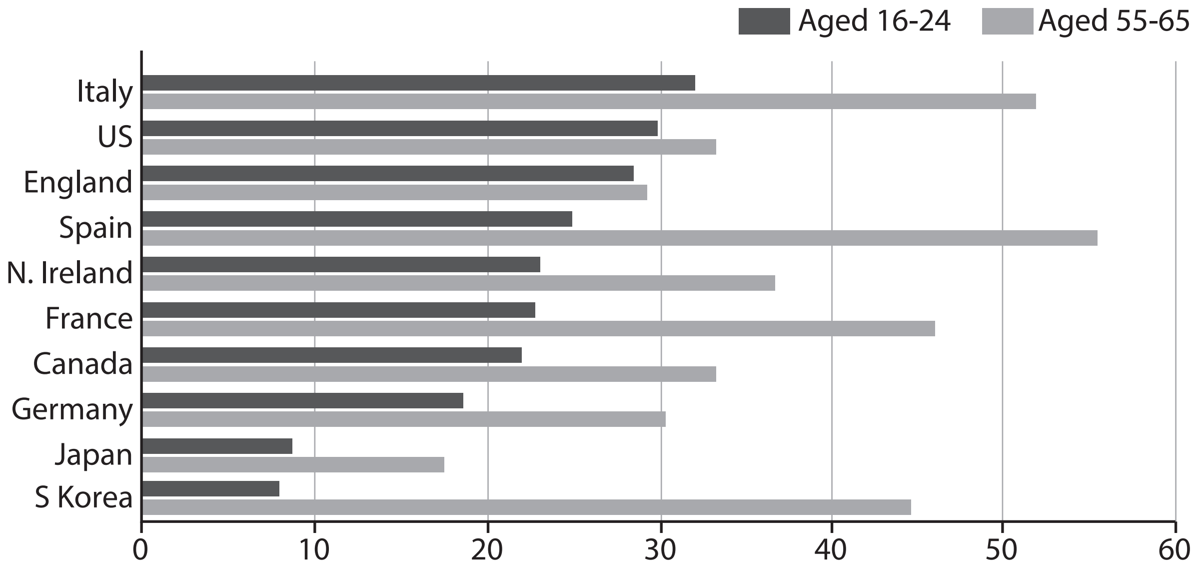
(Source adapted from: ONS.gov.uk)

Figure 4: UK index of output per hour worked, base year 2016 = 100



(Source adapted from: ONS.gov.uk)

Figure 5: Proportion of adults with low literacy and/or numeracy skills, by age, selected countries



(Source adapted from: OECD.org)

(Figures 3, 4 and 5 Source: FT.com 2016 data published https://www.ft.com/content/6ada0002-9a57-11e8-9702-5946bae86e6d 2018)

Extract D

The end of the High Street?

Homebase, the UK's second-largest do-it-yourself (DIY) retailer, made £20–40 million a year profit up to 2016. The Australian conglomerate Wesfarmers bought Homebase for £340 million in 2016, and began to rebrand 24 stores under its own name. It scaled back on curtain, cushion and other homeware sales in favour of power tools and building materials. In 2018 Wesfarmers sold the DIY chain for £1, in the face of "extremely challenging" market conditions and excess store space. The chain was bought by restructuring specialist Hilco, which had also rescued the music chain HMV in 2013, and the stores have gone back to using the Homebase name. Over 70% of Homebase stores are currently losing money and the new owner wants to exit loss-making stores and agree to rent reductions, as sales fell 10% in 2018. Homebase has gone back to popular products and brands dropped by its previous owner Wesfarmers.

The closures will add to the mounting job losses on Britain's high streets. About 25 000 jobs have gone in the first seven months of 2018, according to analysis by an economics thinktank. A further 8 300 jobs are under threat at suppliers, with the multiplier effect meaning that GDP is £1.5 billion less than projected.

Several Marks & Spencer clothing stores closed their doors for the last time as the high-street chain pushes ahead with a transformation plan. It plans to close 100 stores by 2022. Toys R Us, Poundworld and Maplin have shut down completely, while New Look, Mothercare and Carpetright have plans to close hundreds of stores as losses rise sharply. Increasing rents and higher business rates have occurred at the same time as falling consumer confidence. Meanwhile, House of Fraser employees and pensioners are nervously awaiting more details about their future. The £90 million rescue deal by Sports Direct, the sportswear chain controlled by Mike Ashley, will protect 16 000 jobs for the time being.

(Source adapted from: https://www.ft.com/content/00d0bb9e-a6ee-11e8-8ecf-a7ae1beff35b 24 August 2018 and https://www.theguardian.com/business/2018/aug/13/homebase-close-80-stores-high-street-job-losses-mount Patrick Collinson 13 Aug 2018)

50 Discuss factors that are causing many high street retailers in the UK to close some branches or shut down completely. Use a cost and revenue diagram to support your answer.

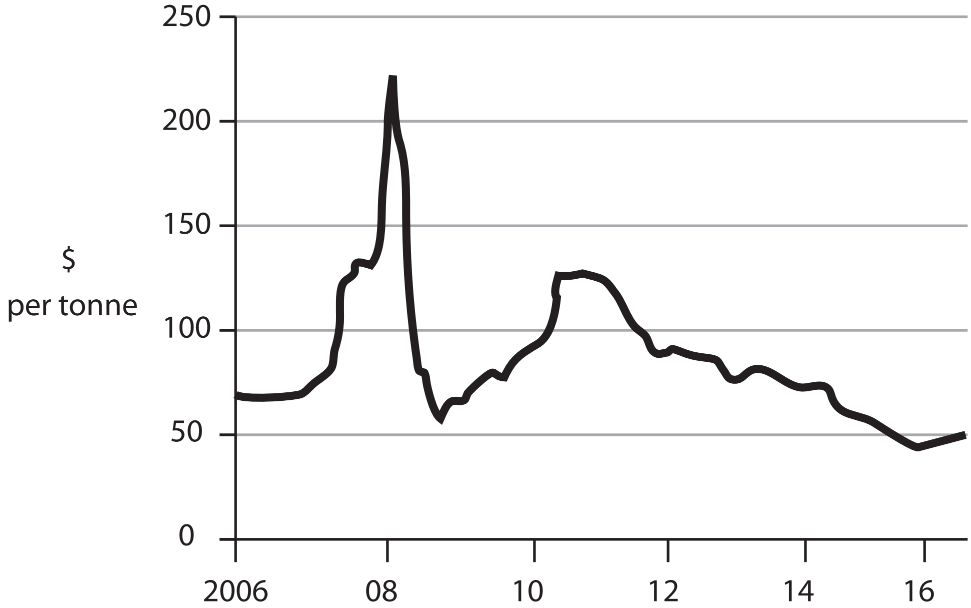
(12)

(Total for Question 50 = 12 marks)

Question 51

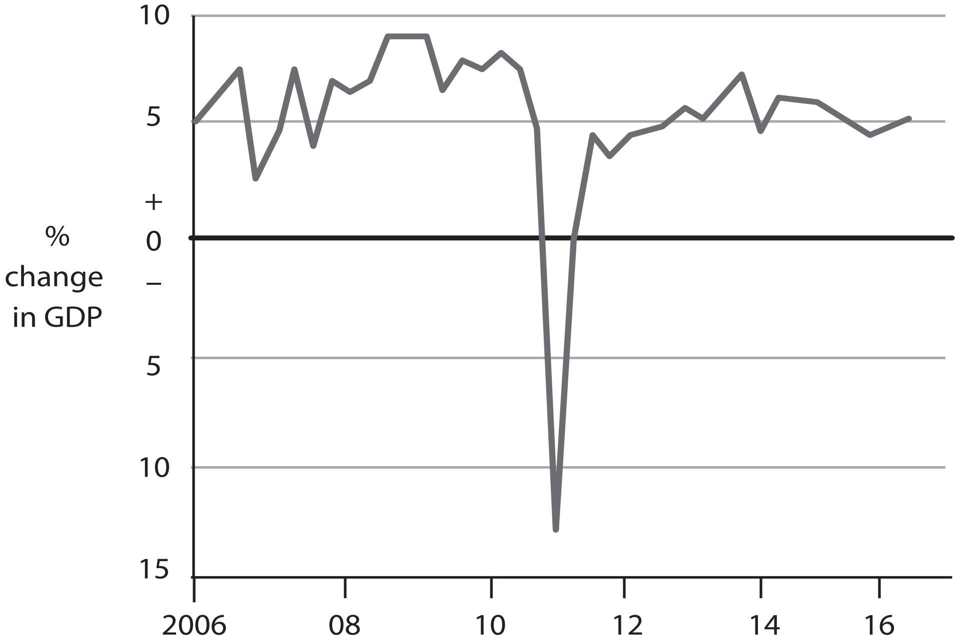
Indonesia

Figure 4: World coal prices, 2006–2016, US dollars per tonne



(Source: http://www.economist.com/news/world-week/21697025-business-week)

Figure 5: Indonesia's real GDP, annual percentage change



(Source: http://www.economist.com/news/world-week/21697025-business-week)

Extract D

Indonesia's economic outlook

The Indonesian economy is expected to grow by an average of 4.8% a year between 2017 and 2021. Joko Widodo, president of Indonesia since 2014, is increasingly confident in his role and now has enough political support to pass some of his desired supply-side reforms. His government has been aggressively trying to improve the business and investment environment by easing regulations and offering tax incentives, for example to firms investing in special economic zones.

Indonesia receives US$2.3 billion a year in overseas development aid, which is mainly spent on education and healthcare. There is also ongoing aid from international institutions and non-government organisations paying for restructuring after the 2004 Indian Ocean earthquake and tsunami, which led to the loss of over 170 000 lives and much damage to economic livelihood. Aid agencies have supported the Indonesian government in providing healthcare free at the point of access for 88 million of the poorest people, free schooling for 12 years for each child, and tertiary education for students accepted into university. There is a scheme to provide each of Indonesia's 15.5 million poorest households with a cash transfer of 200 000 rupiah (US$14.37) a month. The World Bank has approved US$800 million in infrastructure loans to Indonesia, with another US$950 million as conditional loans. The Asian Development Bank has committed itself to lending US$2 billion. In December Japan's development agency lent Indonesia US$535 million to construct two power stations.

(Sources: adapted from http://country.eiu.com/Indonesia and http://www.economist.com/news/special-report/21693404-after-decades-underinvestment-infrastructure-spending-picking-up-last)

Extract E

Indonesia's economic policies as commodity prices collapse

Indonesia is the world's fourth largest exporter of coal and the raw material accounts for 11% of its exports. Its other main exports are crude oil, palm oil, rubber and tin. Its main commodity exports tripled in value between 2000 and 2010, and as exports boomed, so did the economy. But the value of commodity exports has fallen by more than half from its peak. Coal now sells for just US$50 per tonne, against US$125 in 2011.

In the decade to 2014, Indonesia's real GDP grew by an annual average of 6%, but the collapse in commodity prices has slowed the economy. In 2015 growth was 4.8%, the slowest rate since 2009. But compared with many other commodity exporters, Indonesia is getting off lightly.

The value of the rupiah, Indonesia's currency, against the US dollar has fallen by 30% since 2013, but has since stabilised. Other emerging market currencies have depreciated even more steeply over that period. Despite the weak exchange rate, Indonesia's inflation rate has mostly remained within the central bank's target range of 3-5%. The main impact of the rupiah's fall has been to curb imports, helping limit Indonesia's current account deficit to around 2% of GDP despite weaker export earnings. A cautious fiscal policy during the boom years has allowed for a modest fiscal expansion to offset the effects of weak exports and investment. The national debt is just 26% of GDP.

Mr Widodo knows that Indonesia cannot raise its long-term growth rate if the economy remains reliant on coal. It needs a broader range of manufacturing and service industries. If new enterprise is to flourish, Indonesia must support local entrepreneurship. The labour market is inflexible. To start a business takes an average of 47 days, compared with four in Malaysia and two in Singapore. The President's supply-side policies are improving the business climate. The average number of days needed to approve a new power plant has declined from 900 to 200. The government recently revised its "negative investment list" of sectors in which foreign ownership is banned or restricted, fully opening up the rubber, film and restaurant sectors, among others. In 2015 he launched a series of measures to try to reduce government failure, including easing some regulations, streamlining licensing procedures for firms on industrial estates and providing tax incentives to invest in special economic zones.

The government has used savings from cutting fuel subsidies, worth over 4% of GDP, to fund extra capital spending. But the budget deficit still widened to 2.8% of GDP, very close to the legal limit of 3%. If public expenditure is to increase further, the government will need to raise more revenue. That will not be easy. Most workers and employers pay little or no tax. Only 27 million of Indonesia's 255 million people are registered taxpayers, and in 2014 just 900 000 of them paid what they owed, leaving it with a tax revenue to GDP ratio of around 10%. Big companies say that they are being squeezed harder by the tax authorities because they are an easier target.

Infrastructure spending will help bring foreign investment and good jobs to Indonesia as well as encouraging exports. Indonesia's infrastructure problem can be summed up as too few roads and congested ports. In the short term, infrastructure spending puts people to work and boosts demand for raw materials. In the longer term this spending offers the chance to make up for decades of neglect and underinvestment. Indonesia has plans for 65 dams, 16 of which are already under construction. In 2015 work started on the Keureuto Dam, designed to boost agricultural productivity in Aceh. Recently fields were flooded for the massive Jatigede Dam in West Java, after 20 years of delays. Once complete, the dam will irrigate 90 000 hectares of rice paddy, increasing efficiency by giving farmers two harvests a year instead of one.

(Sources: adapted from http://www.economist.com/news/special-report/21693405-secure-growth-it-needs-indonesia-must-resist-its-protectionist-urges-roll-out and http://www.economist.com/news/special-report/21693404-after-decades-underinvestment-infrastructure-spending-picking-up-last)

51 Examine the likely effects on the profitability of Indonesian rice farmers of the government's increased investment in dams (Extract E, lines 43-48). Use a cost and revenue diagram to support your answer.

(8)

END OF SECTION B **(Total for Question 51 = 8 marks)**