

OXFORD CAMBRIDGE AND RSA EXAMINATIONS

Advanced Subsidiary GCE

ECONOMICS

2881

THE MARKET SYSTEM

INSTRUCTIONS TO CANDIDATES

Write your name, Centre number and candidate number in the spaces provided on the answer booklet.

Answer all questions.

Write all your answers on the separate answer booklet provided.

If you need to use additional answer sheets, fasten these sheets securely to the answer booklet.

INFORMATION FOR CANDIDATES

The number of marks is given in brackets [] at the end of each question or part question.

The quality of your written communication will be taken into account in marking your answer to the question labeled with an asterisk (*)

SPECIMEN PAPER

Answer all parts of this question

Townlev Regional Health Authority

All of us at some time in our lives require the services of doctors, dentists and hospitals. Traditionally, in the UK these services have been provided by the public sector, free of charge to users. Like any sector of the economy though, there is a genuine problem of how to meet the health care needs of the community from the limited resources available. The problem of health care is a very good illustration of what economists mean by the 'economic problem'.

The task of allocating resources for health care is carried out by organisations known as Regional Health Authorities. Due to the nature of their funding, there is a maximum quantity of health care that can be provided at any one time. The regional health authority in Townlev is faced with just such a problem.

Suppose it has to provide just two services to the community, medical services through local doctors (GPs) and dental services through local dental practices. The Production Possibility Frontier in Figure 1 shows some of the trade-offs facing the Townley Regional Health Authority.

Patient Treatment Frontier

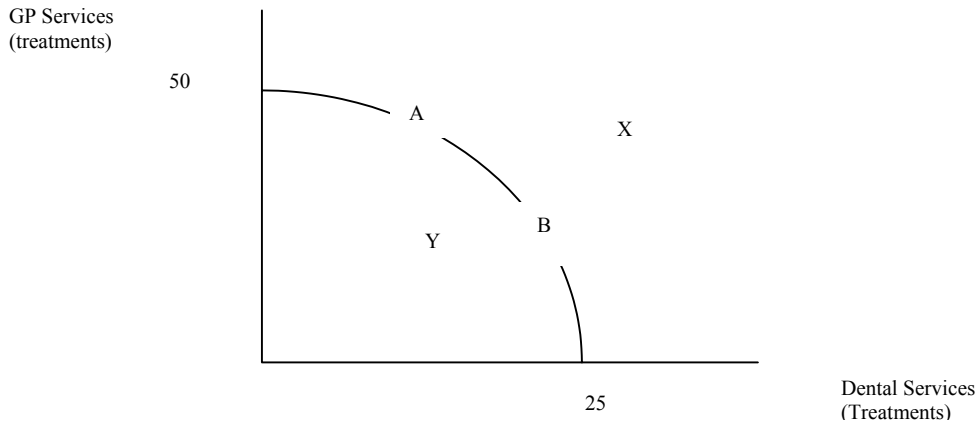


Figure 1

Due to financial pressures and increased demands for its services, the Townley Regional Health Authority is continuously seeking to make a more effective use of its resources.

The Molar Dental Practice, like other dentists in Townley, has recently taken the decision to opt out of the control of the Townley Regional Health Authority. It is now one of a large and growing number of private dental practices in the town, which treat only private patients who pay the ‘full cost’ for any treatment they receive. Market research undertaken for the practice shows the estimated demand schedule for the services it provides. This information is shown in Table I below.

Table I

Estimated Demand Schedule for Treatment Provided by the Molar Dental Practices

Average Price of Treatment	Quantity of Treatment Demanded per month
40	350
35	375
30	400
25	450
20	500
15	600
10	800

Other private dentists in Townley do not charge exactly the same price for treatment as the Molar Dental Practice. However, the market is a very competitive one, with businesses seeking to enhance their reputation in order to attract new patients who are seeking private dental treatment. At present all private dentists are in a situation where they are able to take on any new patients who are willing to pay the charge for the treatment they receive.

- (a) (i) Define the term 'opportunity cost'. (2)
- (ii) With reference to Figure I. explain the trade-offs, which are facing the Townlev Regional Health Authority. (4)
- (iii) How can opportunity cost be used to explain the shape of the production possibility frontier? (2)
- (iv) If the Townlev Regional Health Authority makes a more effective use of its resources, how will this affect the production possibility frontier? (2)
- (b) (i) Use the data in the table to sketch the demand curve for services of the Molar Dental Practice and explain the shape of this curve (4)
- (ii) If the income level of patients falls, use a diagram to explain how this might affect the demand for dental services provided by Molar Dental Practice. (4)
- (c) The 'full cost' of providing dental services consists of some costs which are fixed and other costs which are variable
- (i) With aid of examples, explain the difference between fixed and variable costs for the Molar Dental Practice. (4)
- (ii) If the wages of dental nurses increase, how might this affect the prices charged by the Molar Dental Practice to its patients? (4)
- (d) An economist would argue that the market for private dental treatment in Townlev is an example of monopolistic competition.
- Using the evidence in lines 15-24, discuss the extent to which this market is an example of monopolistic competition. (8)

January 2001

Steady Haul Logistics

Steady Haul Logistics is a small road transport and warehousing company based in the West Midlands. It transports goods and operates a separate storage business in its warehouses. It is just one of many such companies in this part of England. The company's owner, Eddie Shifter, has seen the business grow in recent years to its current size of 20 goods vehicles and 5 warehouses.

The company is operating in a fiercely competitive market, where price is the main reason why customers choose one transport firm rather than another. Eddie's own research for his business, summarised in Table 1, shows this very clearly. He is, however, increasingly concerned about rising fuel prices. A typical annual cost structure for operating one of his goods vehicles is shown in Table 2.

Eddie and his company are currently facing a major dilemma – should they continue to offer both transport and warehouse services at the present level or would it be better to use existing resources differently by selling off some vehicles and increasing the warehouse capacity available to its customers?

Table 1: Weekly Demand Schedule for Road Transport Services

Price (£) (per km)	Quantity Demanded (kms)
14	500
12	1,000
10	3,000
8	6,000
6	9,000
4	12,000
2	14,000

Table 2 Annual Vehicle Operating Cost Structure (% total costs)

- (a) (i) Use the information in Table 1 to draw the demand curve for road transport services. (3)
- (ii) Briefly describe what this curve indicates. [2]
- (iii) Using a diagram, explain how a fall in the price of rail freight might affect the demand for road transport services. (5)
- (b) (i) Define price elasticity of demand. [2]
- (ii) Use the information in Table 1 to calculate the price elasticity of demand for transport services as the price decreases from £8 to £6. [2]
- (iii) Describe how Eddie might have estimated the data shown in Table 1. [4]
- (iv) Explain what use the business can make of price elasticity of demand estimates such as

that calculated above.

[6]

- (c) Eddie's warehouses can be used for alternative purposes. At present, 80% of the space is used for storing his customers' goods, with 20% being used as long-term storage for a local manufacturer. He is considering making this 40% storage for customers and 60% long-term storage for the local manufacturer.

Explain how opportunity cost and a production possibility frontier might be applied to this business situation.

[6]

- (d) (i) What is the difference between fixed costs and variable costs? [2]
- (ii) Explain one fixed cost item that might have been included in the 'Other' category of Table 2. [3]
- (iii) Using the information in Table 2, discuss whether Eddie is right to be 'increasingly concerned about rising fuel prices' (line 9). [10]

5 JUNE 2001

BIG FISH PROWL IN HOLIDAY WATERS

Last year, 18 million Britons went on package holidays. Most of these were low to mid-priced 'sun and sand' packages to the Mediterranean and to Florida with one of the big operators. Until recently, these companies battled away at selling holidays in this market. Since 1997 though, the 'Big Four' (See Table 1) have bought more than two dozen smaller specialist tour operators. Their new owners have quietly taken 5 over without changing the names or the brochures of these companies. Through this take-over strategy, they have increased market share, made it more difficult for others to compete, and moved more up-market in their product range. The effects of all this activity on the profit levels of tour operators remains to be seen. One must also ask whether this means less choice and higher prices for their customers.

The package holiday business is a complex one, which requires the tour operators to secure accommodation and flights often 12 to 18 months ahead of departure. Thereafter, matching this supply with demand from holidaymakers takes place via the market mechanism. Peak period prices, usually during school holidays, are much higher than the equivalent off-peak package. Equally, if customers want choice then they must book early, otherwise they take a risk that the holiday of their dreams will not be available at the last minute at a reduced price. Table 2 shows some estimated elasticities of demand for three typical package holidays.

Table 1: The Big Four

Who owns what?

This is a selective list of the businesses owned by the UK's four largest tour companies.

Thomson

Airline Britannia.

Travel agents Lunn Poly and others.

Tour operators Thomson Holidays, Portland, Crystal, Tropical Places. Austravel, Country Cottages in France, Chez Nous, Something Special, Magic Travel Group, Simply Travel, Spanish Harbour, Headwater.

Airtours

Airline Airtours International.

Travel agents Going Places and others.

Tour operators Airtours, Aspro, Tradewinds, EuroSites, Cresta, Manos, Bridge Travel, Jetset, Panorama, Direct Holidays, Swiss Travel Service.

First Choice

Airline Air 2000.

Travel agents Travel Choice and others.

Tour operators First Choice, Sovereign, 2wentys, Meon, Sunsail, Eclipse, Unijet, Hayes & Jarvis.

Thomas Cook

Airline Flying Colours and Caledonian – to be re-branded as JMC.

Travel agents Thomas Cook.

Tour operators JMC, Club 18-30, Neilson, Time Off, Thomas Cook Holidays.

Adaptation: Daily Telegraph, 11 March 2000.

Table 2: Elasticity of Demand Estimates

Package Holiday Type	Price Elasticity of Demand		Income Elasticity of Demand
	Peak	Off-Peak	
Self-catering to Ibiza	(-)0.6	(-)1.2	-1.0
Fly drive to Florida	(-)0.8	(-)1.4	1.6
Villa holiday to Portugal	(-)0.4	(-)0.8	2.4

- (a) State and give examples of three different factors of production needed to produce a package holiday. [6]
- (b) (i) Define elasticity of supply. [2]
(ii) Using the information in lines 11-12, would you expect the elasticity of supply for package holidays to be elastic or inelastic? Justify your answer. [3]
- (c) (i) Explain what is meant by consumer surplus. [2]
(ii) With the aid of a diagram, explain how higher prices for their customers' (line 10) would affect consumer surplus. [4]
- (d) With reference to Table 2, use diagrams to analyse how an increase in the incomes of package holidaymakers might affect their demand for
(i) self-catering holidays in Ibiza
(ii) villa holidays in Portugal. [6]
- (e) (i) State and describe two characteristics of an oligopoly. [4]
(ii) To what extent does the package holiday market match these characteristics? [8]
- *(f) Discuss how the information in Table 2 could be used by a tour operator. [10]

MAY 2002

An industry riding for a fall

High investment, stiff competition and the unpredictable British weather mean that theme parks are a roller coaster sector of the economy. Many companies are struggling to survive in a market which economists claim has now reached saturation point. One of the exceptions is Chessington's World of Adventures, part of the Tussauds Group, owners of the famous waxworks museum along with theme parks at Thorpe Park and Alton Towers. This company now dominates the theme park market.

Chessington's star attractions are the Samurai ride and the more sedate Beanoland, which together cost a massive £4.5 million to build. These are the major attractions for the visitors who pay an average of £15 for entrance to a park, which *can* accommodate 15000 visitors per day. Table 1 below shows the daily demand for visits to Chessington at different average ticket prices during July.

Unfortunately, for many visitors, a day at Chessington involves them spending more time queuing than actually experiencing the many rides that are available. It is for this reason that Chessington has introduced a priority ticket costing £70 per day, limited to 100 visitors, but giving them the chance to 'jump the queue'.

Economists estimate that most of the smaller family-owned theme parks do not operate at a profit. 'It costs a great deal to build theme parks. This is in addition to labour costs and other operating costs. Despite having loads of visitors, they make little or no return for their owners', said Simon Lake of ABN Amro. Another economist, Pat Aston of Mintel, said, 'There is little doubt that as a theme park opens new attractions, the demand for visits increases. However, it should be recognised that the London Eye has lured some visitors away from theme parks. Disneyland Paris, despite the cost and journey involved, also plays a part in reducing demand for visits to UK theme parks.'

Source: Daily Telegraph, 19th August 2000 (adapted).

Demand schedule for visits to Chessington on a typical July day

Average Price per Ticket (£)	Number of visitors per day
30	6,000
25	10,000
20	12,000
15	14,000
10	16,000
5	18,000

- (a) (i) Define the term opportunity cost. [2]
- (ii) Explain how opportunity cost could be applied to a family deciding on whether to visit a particular theme park. [2]

- (b) Use one diagram in each **case** to explain how the demand for visits to Chessington theme park might be affected by
- (i) a general increase in household income [3]
 - (ii) the opening of a new attraction such as the London Eye. [3]
- (c) Using information in lines 9—11 and Table 1, sketch a diagram to show the current demand and supply position on a typical July day. [4]
- (d) ‘Chessington has introduced a priority ticket costing £70 per day, limited to 100 visitors...’ (Lines 15—16). They have estimated that the price elasticity of demand of this ticket is (-) 0.1.
- (i) What does a price elasticity of demand of (-) 0.1 mean? [2]
 - (ii) Explain two factors, which affect the price elasticity of demand for any good or service. (4)
 - (iii) Explain the effect on Chessington’s revenue of increasing the price of the priority ticket. (3)
- (e) (i) Explain the difference between the fixed and variable costs of the theme park industry. (4)
- (ii) All theme parks have high fixed costs which may deter new firms from entering the industry. State and explain two other types of barrier to entry into an industry. [4]
 - (iii) Discuss the possible implications of barriers to entry for the market structure of the theme park industry. [4]
- (f)* Chessington aims to maximise its profits each year. Discuss whether this is the only realistic objective for all firms. [10]