OCR
RECOGNISING ACHIEVEMENT

Thursday 12 January 2012 – Morning

AS GCE ECONOMICS

F581/01   Markets in Action

Candidates answer on the Question Paper.

OCR supplied materials:
None

Other materials required:
• Calculators may be used.

Duration: 1 hour 30 minutes

Candidate forename		Candidate surname	

Centre number						Candidate number				

INSTRUCTIONS TO CANDIDATES

*   Write your name, centre number and candidate number in the boxes above. Please write clearly and in capital letters.
*   Use black ink. HB pencil may be used for graphs and diagrams only.
*   Answer **all** the questions.
*   Read each question carefully. Make sure you know what you have to do before starting your answer.
*   Write your answer to each question in the space provided. If additional space is required, you should use the lined pages at the end of this booklet. The question number(s) must be clearly shown.
*   Do **not** write in the bar codes.

INFORMATION FOR CANDIDATES

*   The number of marks is given in brackets **[ ]** at the end of each question or part question.
*   The total number of marks for this paper is **60**.
*   Your quality of written communication will be taken into account when marking your answer to the question labelled with an asterisk (*****).
*   This document consists of **16** pages. Any blank pages are indicated.

A calculator may be used for this paper

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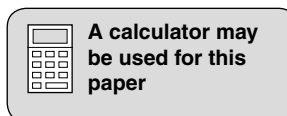
The chewing gum problem

In November 2010 the Peterborough Evening Telegraph reported that the City Council was stepping up its battle against so-called 'chewing gum louts' who were turning the city centre into a sticky eyesore. The problem of discarded gum was growing. In particular, there was anger over the way in which expensive new paving stones in the £12m revamped Cathedral Square had been damaged by the discarded gum which had been 'spat out and squashed' *5* onto the ground.

Peterborough's problem with chewing gum is hardly unique. It is one which is faced by towns and cities throughout the UK and elsewhere. Cleaning one piece of discarded gum from UK streets costs 10 pence; it is estimated that local authorities spend over £150m a year removing gum, a figure which is increasing. *10*

The manufacture of chewing gum is big business. Around 1000m packs are produced each year in the UK alone. Two types of gum are produced by Wrigleys and Kraft, the main manufacturers. These are traditional gum and therapeutic (medicinal) chewing gum which is used for health reasons such as to clean teeth or to stop smoking. Within the market, a growing proportion of the total gum sold is in this latter category. *15*

Manufacturers of therapeutic gum have been quick to realise that this type of gum is one which consumers are prepared to buy in preference to traditional gum. Fig. 1 below shows how increases in its price might affect the sales of traditional gum.

Fig. 1: Estimated changes in the price of therapeutic gum and the demand for traditional gum

% change in price of therapeutic gum	% change in quantity demanded of traditional gum
+5%	+0.5%
+10%	+2%
+20%	+4%

What can cities such as Peterborough do to reduce the market failure caused by discarded gum? A remote possibility is that they might ban the sale of chewing gum as was the case in *20* Singapore in 1992. This ban, which includes imports, still applies, although it was loosened in 2004 when therapeutic chewing gum was allowed following a free trade agreement with the United States of America. More feasible is that Peterborough could join forces with other towns, cities and pressure groups in order to make sure that those who chew gum are given the information to make them more aware of the serious problems which they are causing *25* daily to the urban environment. A more radical way of doing this would be to put a new, high indirect tax on sales of all forms of gum, whilst introducing heavy fines for anyone who is caught discarding gum directly onto the streets.

Answer **all** questions.

1 **(a)** What is meant by the term 'scarcity'?

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.... **[2]**

(b) **(i)** Define the term 'opportunity cost'.

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(ii) Explain why the opportunity cost of removing waste chewing gum from Peterborough's streets is **not** zero.

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Turn over

2 **(a)** Describe what is shown by a production possibility curve.

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(b) A manufacturer produces traditional and therapeutic chewing gum. Draw a production possibility curve to show how the manufacturer can increase production of therapeutic gum.
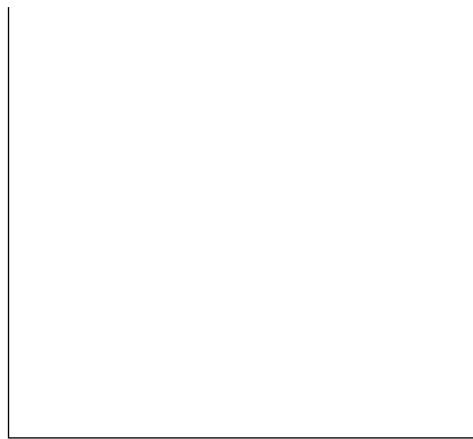
[4]

3 Explain what is meant by producer surplus.

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4 **(a)** Explain **two** reasons why a manufacturer might increase its production of chewing gum.

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(b) Using a diagram, comment on the effects on the market for therapeutic chewing gum of a simultaneous increase in **both** its demand and supply.

price

0   quantity

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Turn over

5 **(a)** Define the term 'cross elasticity of demand.'

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(b) Using information in Fig. 1, comment on whether therapeutic chewing gum and traditional gum are substitutes. (Your answer should include all relevant calculations.)

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6 (a) Define the term 'externality'.

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(b) Explain why the consumption of chewing gum can produce both negative and positive externalities.

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Turn over

7* Lines 19 to 28 give four ways in which the market failure arising from discarded chewing gum might be corrected. Discuss which of these ways might be the most effective in correcting this form of market failure.

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Additional answer space. If you use these lined pages, you must write the question number next to your answer.

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