

Mark Scheme for January 2012

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This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which marks were awarded by examiners. It does not indicate the details of the discussions which took place at an examiners' meeting before marking commenced.

All examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the report on the examination.

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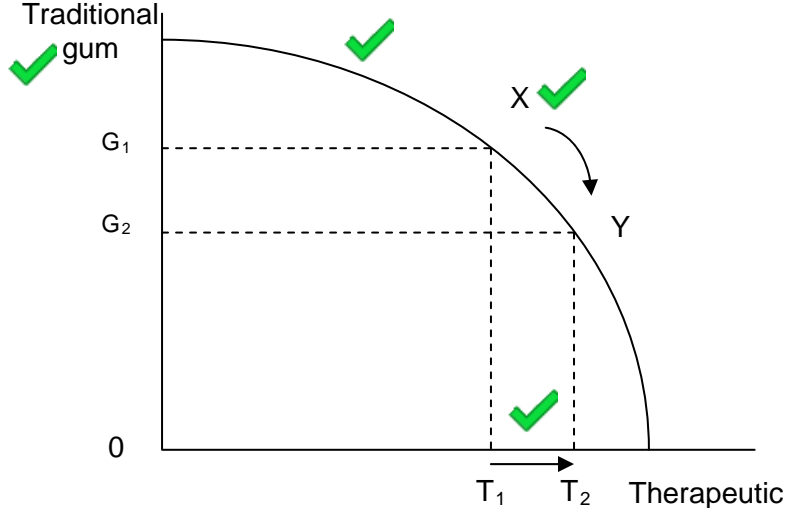
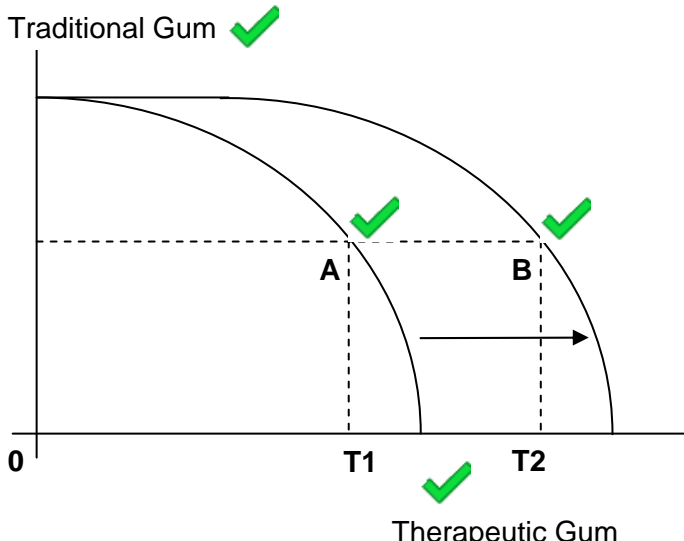
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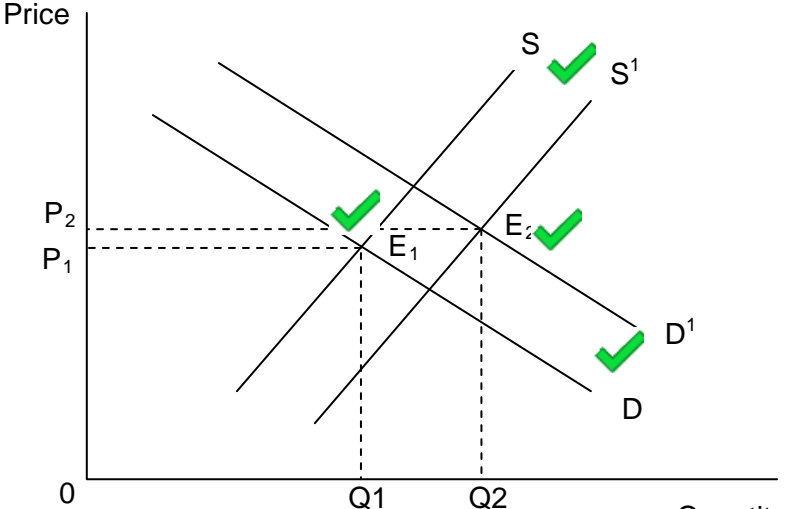
Annotations

Annotation	Meaning
	Unclear
	Benefit of Doubt
	Cross
	Effective Evaluation
	Irrelevant
	Level 1
	Level 2
	Level 3
	Level 4
	Not answered question
	Noted, but no credit given
	Too Vague
	Tick

Question		Answer	Marks	Guidance
1	(a)	For a clear definition, including: limited or finite resources (1) insufficient to meet wants (1)	2	Alternatively, up to two marks for a development of scarcity, e.g. resources are finite (1) because non-renewable (1) Do not accept NEEDS, SUPPLY or DEMAND
	(b) (i)	For a clear definition: the next best alternative (1) foregone (1)	2	Award one mark for general understanding that a choice has to be made.
	(ii)	Resources spent on removing chewing gum could be used to fund other services (1) such as social services or education (1). Each 10p/£150m saved (1) could have been redirected to another service (1).	2	Accept any valid service as example towards which funds could be redirected.
2	(a)	First Mark: <ul style="list-style-type: none"> • maximum quantity or output of two goods OR combinations of goods (1) and THEN one from: <ul style="list-style-type: none"> • given current resources or technology (1) • at maximum efficiency (1) • in the current time period / short term (1) 	2	No marks to be awarded for opportunity cost. No marks for answers which refer to actual output rather than potential output. Accept Pareto efficiency (2) 'can produce' is acceptable for maximum output.

Question	Answer	Marks	Guidance
(b)	<p>Traditional gum</p>  <p>Award one mark for each of:</p> <ul style="list-style-type: none"> • correctly labelled axes (1) • correct shape of PPC (1) • initial position and new position on curve (1) • change to indicate increased production of therapeutic gum (annotated with arrows near axis or T_1 to T_2) (1) • reference to trade-off (1). 	4	<p>Annotation on the diagram is acceptable. (4) max.</p> <p>Pivoting of PPC is acceptable if shown as below and marked as ticked.</p> 
3	<p>The difference between the price a producer is willing to accept and what it is actually paid (2)</p> <p>Or</p> <p>The difference between the price received by firms for a good and the price at which they would have been prepared to supply that good (2)</p>	2	<p>Accept an answer which uses a diagram or numerical example.</p> <p>Be careful to notice any answers which refer to quantity, not price. (0)</p>

Question		Answer	Marks	Guidance
4	(a)	<p>Generally:</p> <p>Award one mark for identification of a reason (1) A further mark for elaboration that makes clear how PRODUCTION has increased. (1)</p> <p>Note:</p> <p>Demand related answers (0) UNLESS related to an increased price incentive which encourages further quantity supplied.</p>	4	<p>Various possibilities including:</p> <ul style="list-style-type: none"> • a rise in the price of chewing gum • a reduction in indirect taxation on chewing gum • a subsidy on (therapeutic) chewing gum • reduced regulation • a reduction in the costs of producing chewing gum • an improvement in efficiency of manufacturing • an introduction of new technology • business objectives such as in search of greater revenue or profit

Question	Answer	Marks	Guidance
(b)	 <p>Award up to four marks for a correct diagram as:</p> <ul style="list-style-type: none"> • shift to right of D (1) • shift to right of S (1) • old equilibrium (1) • new equilibrium (1). <p>Award up to two marks for the outcome which must be explained in writing.</p> <ul style="list-style-type: none"> • increase/decrease/no change in price as appropriate • increase in quantity traded/supplied & demanded or specific reference to diagram in terms of Q1 to Q2 <p>Up to two marks for a comment such as depending on:</p> <ul style="list-style-type: none"> • magnitude of shift of D • magnitude of shift of S • depends on price elasticity of demand • depends on price elasticity of supply 	8	<p>At least one mark for the diagram or explanation must be gained to access comment marks.</p> <p>If one curve only shifted then max 2 for whole answer.</p> <p>No OFR</p> <p>Comment ticks should be shown in the left hand margin.</p> <p>Show breakdown of marks awarded in item comment box e.g. 4+2+2.</p>

Question		Answer	Marks	Guidance
5	(a)	<p>For correct definition such as ‘the responsiveness of demand for one product to a change in the price of another product’ (2).</p> <p>Or formula $\frac{\% \text{ change in quantity demanded of good A}}{\% \text{ change in price of good B}}$</p>	2	<p>Award one mark if the definition is not entirely correct but makes clear that two products are involved.</p> <p>If formula refers only to “demand” (1).</p>
	(b)	<p>The following calculations of XED to be awarded. For correct answer one mark each:</p> $\frac{0.5}{5} = 0.1 \quad \frac{2}{10} = 0.2 \quad \frac{4}{20} = 0.2$ <p>Award up to two marks for interpretation</p> <ul style="list-style-type: none"> • positive XED indicates substitutes (1); • readings are all inelastic (1); • an increase in price of therapeutic gum leads to an increase in demand for traditional gum (1); • they are all below 1... (1). <p>Award up to three marks for appropriate comment such as</p> <ul style="list-style-type: none"> • therefore they are weak substitutes (1); • inelastic estimates indicate poor/weak substitutes (2); • users of therapeutic gum are not very likely to switch to traditional gum (1) as quitting smoking is more of an influence than price in determining demand (1); • the data are estimates (max 1); • factors of demand may change these values (1); • the figures may change over time (1); • questioning the reliability of data (1). 	8	<p>At least ONE calculation or analysis mark MUST BE gained to access comment marks.</p> <p>Do not award calculations if XED value includes a % sign.</p> <p>Fractions 1/5 or 1/10 are acceptable.</p> <p>Allow (1) OFR mark for apt comment on incorrect sign/complement or (1) for magnitude of XED/elastic.</p> <p>Show breakdown of marks awarded in item comment box e.g. 3+2+3.</p> <p>Comment ticks should be shown in the left hand margin.</p>

Question		Answer	Marks	Guidance
6	(a)	<p>For a clear definition: An action taken by one economic agent (1) that has an effect on other people/third parties/those not directly involved spillover effect (1)</p>	2	<p>Award one mark for basic reference to third parties.</p> <p>Accept Social Cost > Private Cost and Social Benefit > Private Benefit. When presented together (2). One of these on its own is (0)</p>
	(b)	<p>For a positive externality: award one mark for an action from which a positive externality arises, and one mark for how this benefits the third party.</p> <p>And</p> <p>For a negative externality: award one mark for an action from which a negative externality arises, and one mark for how this disadvantages the third party.</p> <p>Where an action only is identified, whether this can gain a mark depends on whether there is a clear spillover effect on a third party.</p>	4	<p>Some examples may be:</p> <p>Positive externality:</p> <ul style="list-style-type: none"> • Reduce smoking-related strain on NHS • Fresh breath for those around the consumer <p>A means to reduce passive smoking</p> <p>Negative externality:</p> <ul style="list-style-type: none"> • Discarded chewing gum is an eyesore • Cost of cleaning it up • Stuck on the shoes of pedestrians <p>For example, if the response states “cleaner teeth” with no further development, no third party has been identified so this must be treated as a private benefit and gains 0 marks.</p>

Question		Answer	Marks	Content	Guidance
					Levels of response
7*		<p>The extract refers to four possible ways in which the damage from discarded gum might be reduced. These are</p> <ul style="list-style-type: none"> • Singapore-type ban or partial ban • provision of information on the costs of cleaning up streets from discarded gum • an increase in the indirect tax on chewing gum • heavy fines for those discarding gum in an antisocial way (regulation). <p>The answer should contain an analysis of these approaches, followed by an evaluation and a final judgement on which might be the most appropriate.</p> <p>Subject content could include: <u>information provision</u>: designed to correct market failure arising from the provision of demerit goods. This should include information such as that provided in the second paragraph of the case study, making reference to the costs involved.</p> <p><u>Indirect taxation</u>: designed to discourage consumption of demerit goods. It will lead to a shift to the left of S, meaning that less is supplied and consumed at a higher price. This is likely to reduce inappropriate disposal of gum.</p>	18		<p>Level 4 (13 – 18 marks): For a discussion as to which means of intervention is likely to be most effective in correcting this problem of market failure.</p> <p>(16 – 18) EE For a discussion that makes a final assessment of which option is likely to be most effective based upon analytical underpinning. Stated judgement based on preceding discussion and analysis (16), Elaborated with further reasons or consequences (17-18).</p> <p>(13 – 15) For a discussion of the pros and cons of the method(s) available.</p> <p>All answers at this level must be underpinned with appropriate analysis.</p> <p><i>Complex ideas have been expressed clearly and fluently using a style of writing appropriate to complex subject matter. Sentences and paragraphs, consistently relevant, have been well structured using appropriate terminology. There may be few, if any, errors of spelling, punctuation and grammar.</i></p>

Question		Answer	Marks	Guidance	
				Content	Levels of response
		<p><u>Heavy fines/regulation</u>: this must apply to consumers or the disposal of chewing gum. Evaluation may include problems of enforcement.</p> <p><u>Ban</u>: designed to stop all consumption. This is usually applied when the market failure involved is thought to be very significant.</p> <p>Regulation or a ban may be shown as a shift to the left of S (if producers are being affected with a knock-on effect in lower consumption of gum and therefore disposal). Regulation, a ban or information provision may be shown as a shift to the left of demand when consumers change their behaviour in response to the policy being applied.</p>			<p>Level 3 (9 – 12 marks): For an analysis of how this problem of market failure might be corrected.</p> <p>(11 – 12) Band 2 For specific analysis of how a chosen method reduces the quantity of gum inappropriately DISCARDED i.e. explicit relation to subject of question. TRIGGER FOR possible L4</p> <p>(9 – 10) Band 1 For an analysis of how any one policy impacts upon a market but which does not make the link to discarded chewing gum.</p> <p><i>Relatively straight forward ideas have been expressed with clarity and fluency. Arguments are generally relevant, though may stray from the point of the question. There will be some errors of spelling, punctuation and grammar but these are unlikely to be intrusive or obscure meaning.</i></p> <p>Level 2 (5 – 8 marks): For an application of knowledge as to how the market failure arising from chewing gum might be corrected. Can include unexplained diagram.</p> <p>This application is likely to draw upon the case study and make assertions (not analysis) of the ways in which the problems of chewing gum might be corrected.</p>

Question			Answer	Marks	Guidance	
					Content	Levels of response
						<p><i>Some simple ideas have been expressed in an appropriate context. There are likely to be some errors of spelling, punctuation and grammar of which some may be noticeable and intrusive.</i></p> <p>Level 1 (1 – 4 marks) For a knowledge and understanding of market failure and / or possible remedies.</p> <p><i>This will be in theoretical terms or not in context. Some simple ideas have been expressed. There will be some errors of spelling, punctuation and grammar that will be noticeable and intrusive. Writing may lack legibility.</i></p>

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