

Mark Scheme (SAM)

Pearson Edexcel International Advanced Subsidiary in Economics

Unit 1: Markets in Action

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General marking guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed-out work should be marked UNLESS the candidate has replaced it with an alternative response.

Section A: Supported multiple choice

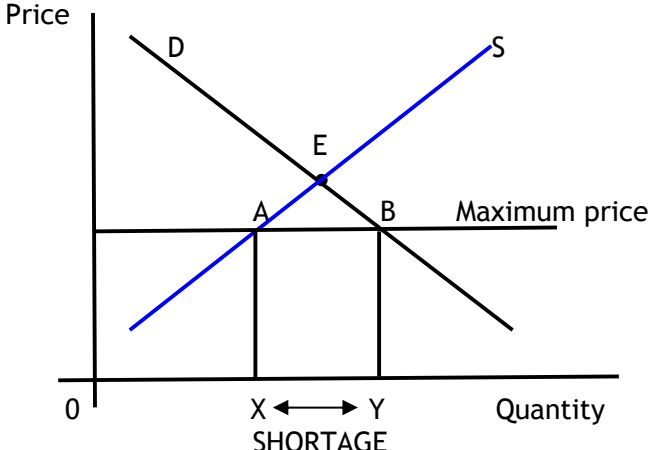
N.B.: Candidates may achieve up to 3 explanation marks even if the incorrect option is selected.

N.B.: Candidates may achieve up to 3 marks (rejection marks) for explaining three incorrect options (provided three different reasons are offered and each option key is clearly rejected).

Question Number	Answer	Mark
1	Answer C (1 mark) Explanation (up to 3 marks) • Definition of a positive statement is required (one that is based on fact/it can be tested as true or false) (1) • Definition of a normative statement (one that is based on value judgement it cannot be tested as true or false) (1) • Application: statement 1 is positive since it can be tested to see whether the tax covers earners in this bracket (1) • Application: statement 2 is normative since it contains the word 'fairly' (1)	(4)

Question Number	Answer	Mark
2	Answer A (1 mark) Explanation (up to 3 marks) • Behavioural economics suggests that consumers do not always behave to maximise utility (1) • Habit often dominates over conscious decision-making (1) • Habit leads to inertia (1) • Decision-making has a cost in terms of time and effort (1) • Acquiring information also has costs associated with it (1) Rejection marks • Option B: if consumers have full information they are more likely to make switches between suppliers (1) • Option C: working out the costs of alternative packages can require good computational skills. Those with such skills are more likely to change suppliers than those without (1) • Option D: increased competition is likely to mean suppliers will make greater efforts to convince consumers to make a change (1)	(4)

Question Number	Answer	Mark
3	Answer B (1 mark) Explanation (up to 3 marks) • Definition of production possibility frontier (maximum output combinations for an economy when all its resources are fully and efficiently employed) (1) • Definition or explanation of economic growth (an increase in real GDP/an increase in the productive potential for an economy/increase in productive capacity) (1) • Application to diagram B: (it is possible to produce more capital and more consumer goods when the curve shifts outwards) (1) • Identification of any one cause of an outward shift in the production possibility frontier: (increase in immigration/quality of labour/capital stock/technology/discovery of new resources) (1) Rejection marks • Option A incorrect since this shows a decrease in productive potential/negative economic growth (1) • Option C incorrect since this shows a movement along the production possibility frontier so demonstrating opportunity cost (1) • Option D incorrect since this shows a reduction in output of both consumer and capital goods (unemployed or underemployed resources) (1)	(4)

Question Number	Answer	Mark
4	Answer D (1 mark) Explanation (up to 3 marks) • A price set below equilibrium (definition of equilibrium) (1) • Means that producers will wish to supply less than at the equilibrium price - EA (1) • While consumers will demand more - EB (1) • Properly-labelled diagram to support this explanation (up to 2 marks).  [Possible credit for mentioning likely emergence of black markets etc if not all marks above are gained (1)] Rejection marks • Option A incorrect because quantity supplied will be reduced (1) • Option B incorrect because, although consumers would like to consume more, they cannot because quantity supplied falls (1) • Option C incorrect because of assumptions of D and S curves, i.e. that quantity S and D depend on price (1)	(4)

Question Number	Answer	Mark
5	Answer B (1 mark) Explanation (up to 3 marks) • Definition of price-elasticity of demand (PED) (1 mark for verbal explanation, or 2 marks for correct formula) • -0.65 suggests that demand is relatively price-inelastic (1) • Negative value of PED means that a price fall leads to an increase in quantity demanded (1) Rejection marks • Option A is incorrect as consumer expenditure would increase only if demand was price-inelastic (PED less than 1) (1) • Option C is incorrect because the income-elasticity of demand is positive, meaning demand increases as income rises (1) • Option D is incorrect as income-elasticity of demand for milk is greater than 1, spending on milk as a proportion of income/expenditure will rise as income increases (1)	(4)

Question Number	Answer	Mark
6	Answer D (1 mark) Explanation (up to 3 marks) • Geographical mobility - the ability/willingness of workers to move from area to area to obtain or change jobs (1) • Availability of affordable housing at destination is important if people are to move in search of work (1) • If giving up accommodation at origin is costly (e.g. difficult to sell property, or have to give up subsidised accommodation which may not be available if worker returns), mobility will be deterred (1) • Hypotheses or information about possible differences in housing markets in US/EU, e.g. extent of owner-occupation, rented sector, subsidies (1) Rejection marks • Option A rejected because if transport better in EU would expect more mobility (1) • Option B rejected because such grants would tend to increase mobility (1) • Option C rejected because better education and training is likely to increase geographic as well as occupational mobility (1)	(4)

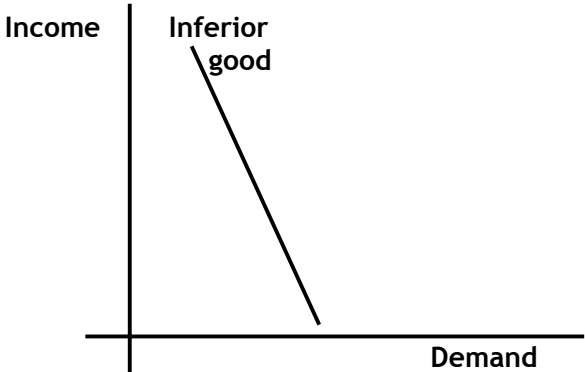
Question Number	Answer	Mark
7	Answer B (1 mark) Explanation (up to 3 marks) • Definition of market failure (the price mechanism fails to allocate resources efficiently/the price mechanism leads to a net welfare loss) (1) • Social benefit exceeds social cost of university education for QeQ1 students (1) • Welfare gain triangle is ZYX or annotation of diagram (1) • Identification of market equilibrium position $MPB=MP_C$ (1) • Identification of social optimum equilibrium position $MSB=MSC$ (1) Rejection marks • Option A is incorrect since the free market quantity $0Q_e$ is less than the social optimum number of students $0Q_1$ (1) • Option C is incorrect since the triangle of welfare gain is ZYX (1) • Option D is incorrect since the marginal external benefit increases/pivots as the quantity of students increases (1)	(4)

Question Number	Answer	Mark
8	Answer A (1 mark) Explanation (up to 3 marks) • Store of value is one of the key functions of money (1) • Enables people to save some of their income to spend at a later date (1) • This works only if the value of the currency remains stable, i.e. if inflation remains low (1) • Hypothesis (or information) that high inflation led to collapse of confidence in Zimbabwean currency, switch to more stable US currency (1) Rejection marks • Option B is inherently unlikely - whatever units the currencies were in, this did not change in 2008 (1) • Option C - hoarding unlikely if inflation was occurring. Implies currency strong (1) • Option D - there wasn't a high level of investment by US firms, but even if there was this is not a plausible reason for changing currencies. US firms invest a lot in Europe but that doesn't mean Europeans adopt the US dollar (1)	(4)

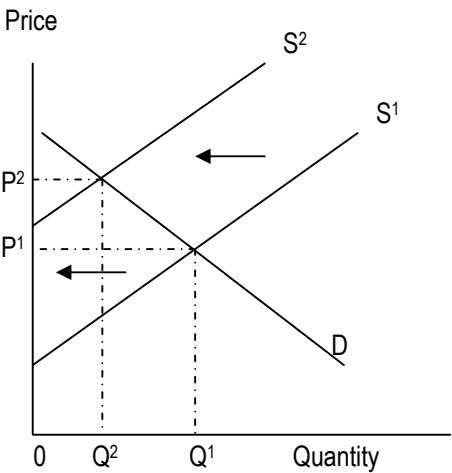
Section B: Data response

Question Number	Answer	Mark
9 (a)	Knowledge, application and analysis (up to 4 marks) - Definition or formula of price elasticity of supply (the responsiveness of supply of a good as a result of a change in its price or, $\% \Delta QS \div \% \Delta P$) (1) - Supply appears to be price inelastic in the short run (1) /the extract refers to up to 2 years for supply to respond to changes in price of sugar (1) - Supply may become relatively price elastic in the long run as farmers have more time to grow sugar (1) - The change in price elasticity of supply over time may be illustrated diagrammatically (1) - Understanding that in the short run at least one factor input is fixed in quantity, whereas in the long run all factor inputs are variable (1)	(4)

Question Number	Answer	Mark
9 (b)	Knowledge, application and analysis (up to 6 marks) - An increase in demand because of speculation/speculative buying of sugar (1) - A decrease in supply resulting from excess rain or poor weather in Brazil or supply being diverted to production of ethanol (1) Diagrammatic analysis which shows: - a shift to the right of the demand curve (1) - a shift to the left of the supply curve (1) - original equilibrium price and quantity (1) - new final equilibrium price and quantity (1)	(6)

Question Number		Mark
9 (c)		(10)
Knowledge, application and analysis - indicative content		
	• Definition of income elasticity of demand or formula. • Definition/outline of a normal good (as income increases so does demand increase or as income decreases so does demand decrease). • Normal goods have a positive income elasticity of demand. • Definition/outline of inferior good (as income increases demand decreases or as income decreases demand increases). • Inferior goods have a negative income elasticity of demand. • Reference to last paragraph in Extract 2: the recession means falling income/but sales of chocolate have increased so it might be an inferior good. • Diagram depicting chocolate as an inferior good. 	
Level	Marks	Descriptor
0	0	A completely inaccurate response.
1	1-2	Shows some awareness of the meaning of income elasticity of demand and/or normal goods and/or inferior goods.
2	3-4	Understanding of income elasticity of demand and the distinction between normal and inferior goods.
3	5-6	Clear understanding of income elasticity of demand, normal goods and inferior goods with appropriate application to context.

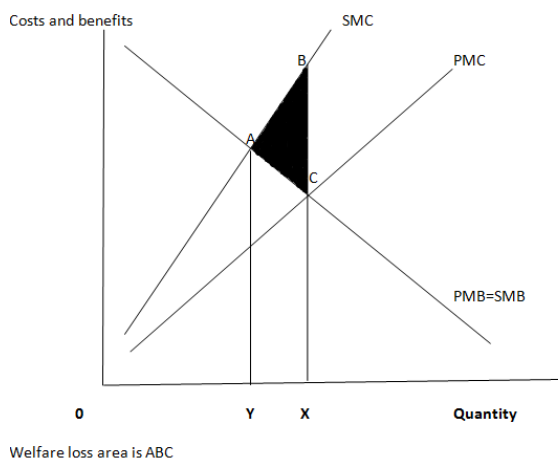
Evaluation - indicative content		
	• The reason why chocolate and sweets might be regarded as inferior goods in a recession is because they are for example, complements to watching TV rather than going out for entertainment which is too expensive when incomes have fallen. • Chocolate and sweets are not inferior goods when (real) incomes increase. They are more like luxury goods being non-essential. • Chocolate and sweets are not inferior goods - determinants are more to do with other factors, for example, cross elasticity of demand for leisure based products. • Discussion on the type of chocolate and sweets - there are various cheap brands (for example low cocoa percentage mass-produced bars) and also very expensive brands (for example hand-made chocolates). The latter are likely to be luxury goods with a high positive income elasticity of demand.	
Level	Marks	Descriptor
0	0	No evaluative comments.
1	1-2	For identifying evaluative comments without explanation.
2	3-4	For evaluative comments supported by relevant reasoning.

Question Number		Mark
9 (d)		(14)
Knowledge, application and analysis - indicative content		
	- The increase in price of sugar will increase production costs for companies making chocolate and sweets. - It is likely that (if demand remains constant) price will increase and output decrease for chocolate and sweets. This could be shown by diagram: - a shift in the supply curve to the left - new higher equilibrium price and lower equilibrium output.  - Profits or revenue in the industry are likely to fall/firms may go bankrupt. - Firms may seek to cut production costs, e.g. through mergers or by sourcing cheaper materials/reduce employment. - Fall in producer surplus.	
Level	Marks	Descriptor
0	0	A completely inaccurate response.
1	1-3	Shows some awareness of the significance of sugar as a cost of production. Material presented is often irrelevant and lacks organisation. Frequent punctuation and/or grammar errors are likely to be present and the writing is generally unclear.
2	4-6	Understanding of sugar as a cost of production and its implications for the price and quantity of sweets and chocolate. This is supported by an accurately-labelled diagram. Material is presented with some relevance but there are likely to be passages that lack proper organisation. Punctuation and/or grammar errors are likely to be present which affect clarity and coherence.

Level	Marks	Descriptor
3	7-8	Clear understanding of sugar as a cost of production and its implications for the price and quantity of sweets and chocolate. This is supported by an accurately-labelled diagram which is explained and applied effectively. Material is presented in a relevant and logical way. Some punctuation and/or grammar errors may be found but the writing has overall clarity and coherence.

Evaluation - indicative content		
	• Discussion of magnitude of the price increase: Extract 1 refers to the raw sugar price increasing by 80% in 2009/so one might expect a significant impact for chocolate and sweet manufacturers. • Discussion on sugar cost as a proportion of total costs for chocolate and sweet manufacturers. Extract 2 indicates that sugar is only the third most expensive ingredient behind cocoa and milk for Mars. It suggests that the rise in sugar prices will not impact much for chocolate and sweet manufacturers/especially as milk prices have been falling. • Discussion on other input costs apart from ingredients, for example labour, capital (machinery and factory), transport, packaging and advertising. Again, it suggests relatively limited impact of the increase in sugar prices. • Discussion of possible shifts in demand curve, meaning that equilibrium prediction is more difficult. • Discussion of price elasticity of demand for chocolate and sweets. If price inelastic demand then chocolate and sweet manufacturers can more easily pass on the extra costs to their customers through higher prices. • Discussion of time period/fluctuations in sugar prices. It might be that sugar prices will fall back in the future so little long-term impact.	
Level	Marks	Descriptor
0	0	No evaluative comments.
1	1-2	For identifying evaluative comments without explanation.
2	3-4	For evaluative comments supported by some reasoning and application to context.
3	5-6	For evaluative comments supported by relevant reasoning and clear application to context.

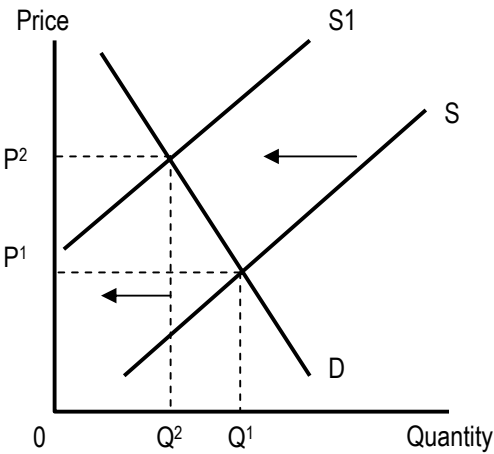
Question Number		Mark
9 (e)		(14)
Knowledge, application and analysis - indicative content		
	• Definition/understanding of market failure (the price mechanism leads to an inefficient allocation of resources/net welfare loss). • Explanation of type of market failure, namely external costs: definition of external costs: cost external to an exchange/negative third party effect/spillover from production or consumption/cost which the price mechanism fails to take into account/cost outside of a transaction/social cost minus private cost equals external cost. • External costs of consumption of sugar: ill health, for example obesity, heart disease, diabetes, tooth decay incur costs to the taxpayer if healthcare is subsidised/paid for by the government or to other individuals if premiums have to be raised in private insurance schemes (N.B. need to distinguish from ill-health costs which fall on individuals). • External costs of production of sugar: clearance of rainforests damages native population/damage to soil/ contributes to greenhouse gases. Wildlife and plant extinction has wider implications. • Market failure may also be due to imperfect market knowledge: consumers may not realise the long-term damage from consuming too much sugar. • Relevant diagram depicting external costs in production (also accept diagram depicting the equilibrium output for MSB as less than MPB in the consumption of sugar). • Welfare loss triangle - where marginal social costs exceed marginal social benefits for given output slice:	

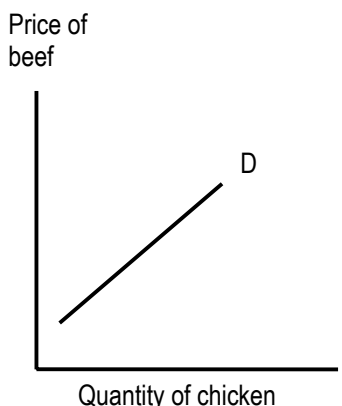


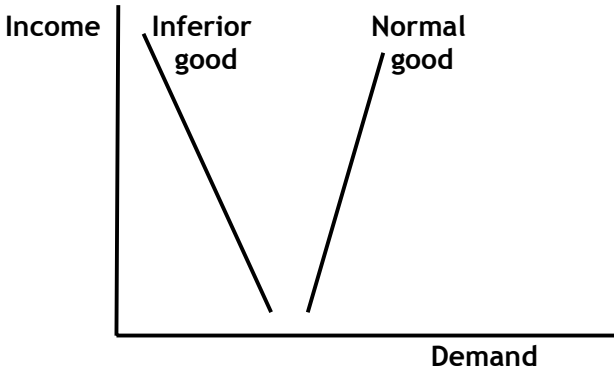
Level	Marks	Descriptor
0	0	A completely inaccurate response.
1	1-3	Shows some awareness of market failure and/or external costs and/or external benefits and/or examples of external costs of production/consumption. Material presented is often irrelevant and lacks organisation. Frequent punctuation and/or grammar errors are likely to be present and the writing is generally unclear.
2	4-6	Understanding of market failure. Explanation and examples of external costs of production sugar which is supported by an accurately-labelled diagram. Material is presented with some relevance but there are likely to be passages that lack proper organisation. Punctuation and/or grammar errors are likely to be present which affect clarity and coherence.
3	7-8	Clear understanding of market failure. Explanation and examples of external costs of production sugar. This is supported by an accurately-labelled diagram which is explained and applied effectively. Material is presented in a relevant and logical way. Some punctuation and/or grammar errors may be found but the writing has overall clarity and coherence.

Evaluation - indicative content		
	• Significance of market failure: concerning external costs the market equilibrium output will exceed the social optimum output/sugar is over-produced and over-consumed/market price differs from social optimum price. • Magnitude of external costs: sugar is heavily over-consumed in developed countries and responsible for many premature deaths/and so enormous pressure on healthcare provision/implications for taxation. • Time factor: external costs from sugar may diminish if healthier substitutes are developed or grow in popularity/improved market knowledge may lead to healthier lifestyles. • The sugar shortage in US is more associated with government failure by restricting imports of sugar to protect domestic farmers. This is not a market failure. Government actions also damage farmers in developing countries. • Speculative buying of sugar in the commodity market /leading to profiteering or uncertainty over future prices. • Need for balanced view which recognises there are benefits associated with production/consumption. • Major source of income and employment in some developing countries. • Export earnings for some developing countries. • Major source of calorie intake for some people on low incomes.	

Level	Marks	Descriptor
0	0	No evaluative comments.
1	1-2	For identifying evaluative comments without explanation.
2	3-4	For evaluative comments supported by some reasoning and application to context.
3	5-6	For evaluative comments supported by relevant reasoning and clear application to context.

Question Number	Answer	Mark
10 (a)	Knowledge, application and analysis (up to 6 marks) • Explicit reference to Figure 1 to show price increase of beef, e.g. from 125 cents to 170 cents or 45 cents rise (36 % per cent rise. (Accept approximate figures) (1) • Increase in price of beef caused by: ○ rise in price of cattle feed (1) ○ drought in Australia and New Zealand (1) ○ increase in production costs due to either of the above (1) Diagram (up to 3 marks)  • A shift in supply curve (1) • The original equilibrium price (1) • The new equilibrium price (1) NB: Award a maximum of 4 marks if no diagram.	(6)

Question Number	Answer	Mark
10 (b)	Knowledge, application and analysis (up to 4 marks) • Definition or formula for cross elasticity of demand (XED): (The responsiveness in demand for good B due to a change in price of good A) or $(\% \Delta QD \text{ good B} \div \% \Delta P \text{ good A})$ (1) • Reference to the goods being substitutes (1) • Reference to the goods having a positive cross elasticity of demand (1) • Application: e.g. the rise in price of beef is likely to cause an increase in demand for chicken or fish (1) • Correctly-labelled diagram depicting price of one meat/demand for other meat (1) 	(4)

Question Number		Mark
10 (c)		(10)
Knowledge, application and analysis - indicative content		
	- Definition or formula for income elasticity of demand (YED): (The responsiveness of demand for a good due to a change in income) or $(\% \Delta QD \div \% \Delta Y)$. - Reference to Extract 1 which suggests beef burgers might be inferior goods (e.g. fast food restaurants have benefitted from recession as consumers switch to burger places). - Explanation of inferior good (as income rises the demand for a good falls). - Inferior goods have a negative YED. - Explanation of normal good (as income rises so too will demand for a good). - Normal goods have a positive YED. - Correctly-labelled diagram depicting a normal good or inferior good: 	
Level	Marks	Descriptor
0	0	A completely inaccurate response.
1	1-3	Shows some awareness of the meaning of income elasticity of demand and/or normal goods and/or inferior goods.
2	4-6	Understanding of income elasticity of demand and the distinction between normal and inferior goods.

Evaluation - indicative content		
	- Discussion of beef in general; it may be a normal good. - Discussion of different types of beef - some parts are very expensive and more like a luxury good and Figure 1 refers to 'high quality beef'/other parts might be inferior and Figure 1 refers to 'standard quality beef'. - Discussion of free-range or organic beef. - Discussion of differences in income elasticity of demand, e.g. due to different income levels of consumers/developed or developing countries/cultural factors.	
Level	Marks	Descriptor
0	0	No evaluative comments.
1	1-2	For identifying evaluative comments without explanation.
2	3-4	For evaluative comments supported by relevant reasoning.

Question Number		Mark
10 (d)		(14)
Knowledge, application and analysis - indicative content		
	- Definition of external cost: (cost external to an exchange/negative third party effect/spillover from production or consumption/cost which the price mechanism fails to take into account/difference between private costs and social costs). - Examples of external costs associated with destroying rainforest to convert to cattle ranching and crop growing e.g. increase in carbon dioxide emissions or global warming/effects in terms of crop failure/rising sea levels/wildlife destruction. - Definition of market failure: the price mechanism fails to allocate resources efficiently/price mechanism leads to a misallocation of resources. - Market failure is due to over-production and under-pricing/social costs exceeding social benefits at output Q_e, or, market failure occurs since marginal social costs exceed marginal social benefits at output Q_e. Diagram: - MPC and MB curves - MSC curve - Social optimum and market equilibrium positions labelled or explained in text - Welfare loss area shaded in (black triangle above) and named	

Level	Marks	Descriptor
0	0	A completely inaccurate response.
1	1-3	Shows some awareness of market failure and/or external cost and/or an example. Material presented is often irrelevant and lacks organisation. Frequent punctuation and/or grammar errors are likely to be present and the writing is generally unclear.
2	4-6	Understanding of market failure and/or external cost and/or examples. This is supported by an accurately-labelled diagram. Material is presented with some relevance but there are likely to be passages that lack proper organisation. Punctuation and/or grammar errors are likely to be present which affect clarity and coherence.
3	7-8	Clear understanding of external costs and market failure. There is an accurately-labelled diagram which is explained and applied effectively to the context. Material is presented in a relevant and logical way. Some punctuation and/or grammar errors may be found, but the writing has overall clarity and coherence.

Evaluation - Indicative content		
	• Magnitude of destruction: seems huge as Extract 2 refers to 7,330 square miles of forest lost each year/problem is increasing over recent years. • Time period: destruction has been going on for many years/a tipping point may come in terms of irreversible climate change. • Discussion of possible benefits, for example employment and income for local communities/increase availability of food/reduction in prices/reduction in hunger. • Government might be forced to take action, for example subsidies to create sustainable development or an increase in policing to protect rainforest/but problems with these such as opportunity cost of the subsidies and difficulty in protecting such a vast area of land.	
Level	Marks	Descriptor
0	0	No evaluative comments.
1	1-2	For identifying evaluative comments without explanation.
2	3-4	For evaluative comments supported by some reasoning and application to context.
3	5-6	For evaluative comments supported by relevant reasoning and clear application to context.

Question Number		Mark
10 (e)		(14)
Knowledge, application and analysis - indicative content		
	- Definition of government subsidy (grant to increase production or reduce price). - Diagram of subsidy or written explanation that supply increases and price falls. Price Quantity - Increase in supply curve. - Original and new equilibrium price. - Subsidy area identified (GLRP2). - Benefit to local communities, e.g. increase in employment and income/replanting forest and tourism is labour intensive/positive multiplier effects. - Benefits to local communities, e.g. maintain way of life/secure lifestyle or forest for future generations. - Benefit to environment: reduction in deforestation and thus carbon emissions. - Accept macro arguments, e.g. improve balance of payments on current account due to attracting more overseas visitors/increase foreign investment.	

Level	Marks	Descriptor
0	0	A completely inaccurate response.
1	1-3	Shows some awareness of the significance of subsidies as reducing costs of production. Material presented is often irrelevant and lacks organisation. Frequent punctuation and/or grammar errors are likely to be present and the writing is generally unclear.
2	4-6	Understanding of subsidies as a factor in reducing costs of production and implications for price and quantity. This is supported by an accurately-labelled diagram. Material is presented with some relevance but there are likely to be passages that lack proper organisation. Punctuation and/or grammar errors are likely to be present which affect clarity and coherence.
3	7-8	Clear understanding of subsidies as a factor in reducing costs of production and implications for price and quantity. This is supported by an accurately-labelled diagram which is explained and applied effectively. Material is presented in a relevant and logical way. Some punctuation and/or grammar errors may be found, but the writing has overall clarity and coherence.

Evaluation - indicative content		
	- Extract 2 mentions that the amount of funds available for sustainable development projects has yet to be announced by the government - it may be a very small amount and so little beneficial impact for protecting rainforest and so reducing global warming. - Brazilian government might be able to obtain some funding of the project from overseas, e.g. European Commission/World Bank/International Monetary Fund. Protecting the rainforest could become part of the carbon trading scheme. - Opportunity cost to government/higher taxes or borrowing or less spending elsewhere/affordability of scheme in time of slow global economic recovery. - Time period issue: the subsidies may be required for a very long time - raises issue of affordability.	
Level	Marks	Descriptor
0	0	No evaluative comments.
1	1-2	For identifying evaluative comments without explanation.
2	3-4	For evaluative comments supported by some reasoning and application to context.
3	5-6	For evaluative comments supported by relevant reasoning and clear application to context.

