

Question 4 (Answer: **D**)

- A public good must be both non-excludable and non-rival.
- Anything with a fare, a fence or an owner who can charge is excludable, so it is not a public good.
- Government *ownership* is irrelevant – what matters is whether non-payers can be excluded.

Question 11 (Answer: **B**)

- A public good is non-excludable: households cannot be prevented from consuming it.
- It is also non-rival, so one person's consumption leaves the amount available unchanged.
- Not being able to *value* the benefit describes a merit good's information failure, not a public good.

Question 13 (Answer: **B**)

- Direct public provision means the state produces and supplies the service itself.
- So look for a government-run and government-funded facility.
- A charity, or a private provider given a subsidy, is not direct public provision.

3	• A detailed knowledge and understanding of relevant economic concepts is included, using relevant explanations. Explanations are supported by examples, where appropriate. • The response clearly addresses the requirements of the question and explains economic issues, and fully develops these explanations. • Analysis is developed and detailed and makes accurate and relevant use of economic concepts and theories. Where necessary, there is accurate and relevant use of analytical tools such as diagrams and formulae, and these are fully explained. • Responses are well-organised, well-focused and presented in a logical and coherent manner.
2	• Knowledge and understanding of some relevant economic concepts is included, using explanations and examples that are limited, over-generalised or contain inaccuracies. • The response addresses the general theme of the question and the relevant economic issues, with limited development. • Analysis is generally accurate with some development but little detail. Uses analytical tools such as diagrams and formulae where necessary. Use of these tools is partially accurate or not fully explained. • Responses are generally logical and coherent but are sometimes lacking in focus or organisation.
1	• A small number of relevant knowledge points are included and the response is limited by significant errors or omissions. • The response has little relevance to the question. • Analysis where provided is largely descriptive. Use of analytical tools such as diagrams and formulae, where necessary, may contain significant errors or be omitted completely. • Responses show limited organisation of economic ideas.
0	No creditable response.

Use this table to give marks for each candidate response for AO3 Evaluation for **Questions 4(b) and 5(b)**.

Level	Description
2	- Provides a justified conclusion or judgement that addresses the specific requirements of the question. - Makes developed, reasoned and well-supported evaluative comment(s).
1	- Provides a vague or general conclusion or judgement in relation to the question. - Makes simple evaluative comment(s) with no development and little supporting evidence.
0	No creditable response.

Question	Answer
1(c)	Consider the extent to which direct provision of electricity in Mexico through state-owned companies may be advantageous to consumers. Potential advantages: • State-owned companies seen as more likely to be drivers of growth, possibly leading to higher living standards. • The government may have more financial resources to support the state-owned companies than the private sector, which could lead to lower prices and a more efficient supply to consumers. • State-owned companies might be more likely to operate in the national interest than private companies, potentially benefitting. (Up to 2 marks) Potential disadvantages: • Operating costs of the state-owned electricity producers are significantly higher than in private companies, which could lead to higher prices for consumers. • State-owned companies have old and inefficient plants that are expensive to maintain, which could lead to a less efficient supply to consumers. • There will be less investment in renewable energy because the government has little interest in this. (Up to 2 marks) Max 3 marks Note: The focus of the question is consumers. Evaluation Offers a valid judgement on the extent to which direct provision of electricity in Mexico through state-owned companies may be more advantageous to consumers Max 1 mark

Question	Answer
1(d)	With the help of a diagram, assess whether the potential advantages of providing a subsidy to keep down the price of electricity in Mexico will outweigh the potential disadvantages. Up to 4 marks for explanation/analysis: An accurate diagram of a subsidy: • Axes correctly labelled and demand and supply curves correctly drawn and labelled. • Supply curve shifts to the right leading to a new equilibrium position. (1) Explanation of the potential advantages of a subsidy, including a lower price and a higher quantity. (Up to 2 marks) Explanation of the potential disadvantages of a subsidy, including the fact that it will need to be financed by the government, it could lead to inefficiencies and there would be an opportunity cost. (Up to 2 marks) Up to 2 marks for evaluation: Relevant evaluation of whether the potential advantages of providing a subsidy to keep down the price of electricity in Mexico will outweigh the potential disadvantages (1) to reach a conclusion. (1)
1(e)	Assess the potential benefits and limitations of Mexico keeping its oil to generate the country's electricity. Up to 4 marks for explanation/analysis: • Explanation/analysis of the potential benefits of Mexico keeping more of its oil to generate the country's electricity, such as in relation to a shift towards greater energy self-sufficiency. (Up to 3 marks) • Explanation/analysis of the potential limitations of Mexico keeping more of its oil to generate the country's electricity, such as whether Mexico has the capacity to produce enough electricity for its population of about 130 million or the possible impact of such a policy on its balance of trade (2022 data shown in Fig. 1.1) given that its crude oil will now be kept in the country rather than exported. (Up to 3 marks) Up to 2 marks for evaluation: • Relevant evaluation which weighs up the potential benefits and limitations of Mexico keeping its oil to generate the country's electricity (1) to reach a conclusion. (1)

Question	Answer
EITHER	
2(a)	With the help of a formula, explain what is meant by price elasticity of demand for a product and consider the importance of time in determining whether demand for the product is likely to be relatively price elastic or relatively price inelastic. Follow the point-based marking guidance at the top of this mark scheme and award: up to 3 marks for AO1 Knowledge and understanding, up to 3 marks for AO2 Analysis, up to 2 marks for AO3 Evaluation. AO1 Knowledge and understanding (max 3 marks) • A knowledge and understanding of the formula for calculating price elasticity of demand: percentage change in the quantity demanded of a product divided by percentage change in the price of the product. (1) • If the PED value is greater than one, the demand is price elastic, which means that percentage change in demand is greater than percentage change in price. (1) • if the PED value is between zero and one, the demand is price inelastic, which means that percentage change in demand is less than percentage change in price. (1) AO2 Analysis (max 3 marks) An analysis of the importance of time in determining PED: • Demand for a product is likely to be more inelastic in the short run than in the long run. (1) • In the long run, consumers have more time to think about possible alternatives to a product. (1) • Habit is more likely to influence the short-run pattern of consumption, making demand less likely to be affected by price changes. (1) AO3 Evaluation (max 2 marks) Offers a valid judgement on the importance of time in determining whether demand for the product was likely to be relatively price elastic or relatively price inelastic (1) to reach a conclusion. (1) AO1 Knowledge and understanding AO2 Analysis AO3 Evaluation

Question	Answer
2(b)	Assess whether knowledge of a product's income elasticity of demand is more important to a firm producing it than knowledge of its cross elasticity of demand. Use Table A: AO1 Knowledge and understanding and AO2 Analysis and Table B: AO3 Evaluation to mark candidate responses to this question. AO1 and AO2 out of 8 marks. AO3 out of 4 marks. Indicative content Responses may include: AO1 Knowledge and understanding and AO2 Analysis • A knowledge and understanding and analysis of income elasticity of demand (YED), such as in relation to whether a product is a normal good, where YED will be positive, or an inferior good, where YED will be negative and an analysis of the importance of it to a firm, i.e. the extent of its importance. • A knowledge and understanding and analysis of cross elasticity of demand (XED), such as in relation to whether two goods are substitutes, where XED will be positive, or complements, where XED will be negative and an analysis of the importance of it to a firm, i.e. the extent of its importance (Up to 8 marks) Level 1 responses will be assertive and lacking in explanations/mainly descriptive and/or mainly lacking in relevance to the question. Level 2 responses may contain some inaccuracies and will be one-sided. Analysis will be explained at least in part and will be largely relevant to the question. Level 3 responses will consider alternative policies/concepts etc. and will be balanced. Explanations of points raised will be offered and will be accurate and relevant to the question. AO3 Evaluation Evaluation of whether YED or XED is likely to be more important for a firm producing a product to reach a conclusion. Accept all valid responses. A one-sided response cannot gain any marks for evaluation. (Up to 4 marks)

Question	Answer
2(b)	AO1 Knowledge and understanding and AO2 Analysis
	AO3 Evaluation

3(a)	With the help of examples, explain the nature and characteristics of free goods and private goods (economic goods) and consider the significance of the distinction between these two types of good. Follow the point-based marking guidance at the top of this mark scheme and award: up to 3 marks for AO1 Knowledge and understanding up to 3 marks for AO2 Analysis and up to 2 marks for AO3 Evaluation. AO1 Knowledge and understanding (max 3 marks) Free goods: • A free good is one which is consumed by people without a situation of scarcity arising, i.e. there is enough of the good to satisfy everybody and it has no opportunity cost, such as sunlight. (1) Private goods (economic goods): • A private or economic good is one which is consumed by an individual for their own private benefit, such as clothing. (1) Use of appropriate examples of each type of good to support the explanations. (1) AO2 Analysis (max 3 marks) Free goods: • As a free good is not scarce, it does not require a market. The supply of the good equals the demand for it at zero price. It takes no factors of production to produce a free good and so there is no opportunity cost involved; analysis of the significance of there being no opportunity cost. Private (economic) goods: • Excludability: people can be excluded from consuming it if they do not pay the required price for it. • Rivalry: the consumption of a private good by one person reduces its availability for other people, i.e. there is rivalry in such a situation because consumers are in competition with other consumers to consume a particular product. AO3 Evaluation (max 2 marks) Offers a valid judgement on the significance of the distinction between the two types of good (1) to reach a conclusion. (1) AO1 Knowledge and understanding AO2 Analysis AO3 Evaluation
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3(b)	Assess whether education should be classified as a public good or a merit good. Use Table A: AO1 Knowledge and understanding and AO2 Analysis and Table B: AO3 Evaluation to mark candidate responses to this question. AO1 and AO2 out of 8 marks. AO3 out of 4 marks. Indicative content Responses may include: AO1 Knowledge and understanding and AO2 Analysis Public good: • In contrast to private goods, public goods are provided by society as a whole so that everyone can benefit from them. • Non-excludability: once a public good has been provided for one person, it is not possible to stop other people from benefiting from such a good (i.e. no one is excluded) (this would not apply to education). • Non-rivalry: as more people consumer the public good, the benefit to those already consuming it is not reduced (i.e. consumption by one person does not prevent others from consuming it). • Non-rejectability: even if a person does not want the public good, they are not actually able to reject it. • Free rider issue: it is impossible to exclude a person who has not paid. Merit good: • A merit good is a particular type of private good. • Like other private goods, a merit good is both rival and excludable. • What distinguishes a merit good is under-consumption if provided through the private sector as a result of imperfect information in the market, such as education (there has to be a clear focus on education throughout the answer). (Up to 8 marks) Level 1 responses will be assertive and lacking in explanations/mainly descriptive and/or mainly lacking in relevance to the question. Level 2 responses may contain some inaccuracies and will be one-sided. Analysis will be explained at least in part and will be largely relevant to the question. Level 3 responses will consider alternative policies/concepts etc. and will be balanced. Explanations of points raised will be offered and will be accurate and relevant to the question.
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3(b)	AO3 Evaluation - Evaluation of the distinction between the features and characteristics of a public good and a merit good. - In conclusion, education is provided through both the public sector and the private sector and so should be considered as a merit good rather than a public good. Accept all valid responses. A one-sided response cannot gain any marks for evaluation. (Up to 4 marks)
	AO1 Knowledge and understanding and AO2 Analysis
	AO3 Evaluation

Question 3 (Answer: C)

- Market forces cannot allocate a good that is non-excludable and non-rival.
- Street lighting is exactly that: no one can be charged and one person's use does not reduce another's.
- Hospitals, railways and television programmes can all be charged for, so markets can supply them.

Question 3 (Answer: B)

- Non-rival means one person's consumption does not reduce what is available to anyone else.
- Non-*excludable* is the separate property that a non-payer cannot be kept out.
- So the statement about one person's use not reducing another's is the non-rivalry one.

Question 13 (Answer: A)

- A merit good brings more benefit than consumers realise, so they under-consume it in a free market.
- That information failure is the market failure the government is correcting.
- Education also has positive externalities, so the social benefit exceeds the private benefit.

Question 4 (Answer: B)

- A good is *private* if it is both excludable and rival – a ticket makes it excludable.
- Art galleries are thought to bring benefits the visitor undervalues, which makes it a merit good.
- Government ownership does not make something a public good; that depends on the good's characteristics.