AQA A-LEVEL ECONOMICS · 7136

ECONOMICS



MARK SCHEME

3.1.8.4 POSITIVE AND NEGATIVE EXTERNALITIES

SCORE	PERCENTAGE
/530	%

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Mark schemes

1. C

[1]

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2.

Issues and areas for discussion include

Introduction	• Links between the quotation and economic issues that are contested e.g: ◦ Positive/ negative externalities ◦ Consumer choice/ monopoly power ◦ Food security/ distributive issues
Developing the response to the question	• Arguments for government support of production and use, e.g: ◦ Consumer sovereignty (assuming consumers want them) ◦ Efficiency arguments ◦ The need to feed a rapidly expanding population ◦ The need for technical progress ◦ Alleged external benefits • Arguments against, e.g: ◦ Consumer sovereignty (European consumers appear not to want them) ◦ Market failures such as Environmental damage, Other negative externalities such as damage to organics; health concerns, Monopolistic practices, Asymmetric information ◦ Government failure
Evaluation	• Market failure versus government failure • Consideration of whether consumers/governments/farmers have sufficient information, or whether they are influenced by the media, pressure groups and interested parties (both for and against GM crops) • Very perceptive and aware candidates might discuss whether the word 'support' in the question simply means 'allow' or 'facilitate' or whether there is an argument about actively encouraging GM growers, e.g. through subsidy. • Discussing whether intervention: is likely to correct or reduce any perceived market failure, eg the negative externalities produced by petrol/diesel fuelled cars; might lead to government failure; might increase or reduce economic efficiency; might increase or reduce economic welfare. *Examiners should note that it may be possible to award some marks for basic evaluation such as consideration of a number of pros and cons. However, this must be considered as low-level evaluation and rewarded accordingly. Stronger evaluation would prioritise the arguments for and against, and/or give economic reasons for justifying a particular policy decision.*

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Also give credit for:	• relevant use of evidence and examples not contained in the data • diagrams • an overall judgement on the issues raised

It will only be possible for candidates to consider a few of the above. They may also discuss issues not discussed above

[25]

3. B

[1]

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4.

The issues identified below are intended to provide an indication of some of the areas which might be discussed. Candidates can only be expected to consider a few of these and / or other issues in the time available.

Issues and areas for discussion include:

Introduction	• meaning of environmental market failure) • examples of supply-side policies • reasons why landfill exemplifies market failure, eg missing markets for recycled products, negative externalities, local / national decisions favouring landfill over its alternatives
Developing the response to the question	• general policies, e.g: ◦ market-based policies ◦ command-and-control policies • specific methods / strategies, eg reduction, re-use, recovery, recycling, disposal (alternative methods of, eg landfill, incineration) • specific policies (some but not all mentioned in the data) aimed at supporting these methods / strategies, eg: ◦ landfill tax (polluter pays / market based) ◦ fines for dumping (command-and-control) ◦ subsidies for favoured recycling schemes ◦ targets for re-cycling ◦ subsidies / carrot and stick approaches • the alternative of non-intervention / allowing markets to work (the extract mentions market forces and price signals in scrap metals and suggests that a market for 'mined' recyclables from landfill could emerge in due course).
Evaluation	• comment on scarce / finite resources and the possibility of re-cycling in the case of metals, so that they become, in a sense, 'renewable' • role of government / legal sanctions • market failure versus government failure • the need for international / global action • pros and cons of particular policies, eg composting, incineration. Examiners should note that it may be possible to award some marks for basic evaluation such as consideration of a number of pros and cons. However, this must be considered as low-level evaluation and rewarded accordingly. Stronger evaluation would prioritise the arguments for and against, and / or give economic reasons for justifying a particular course of action.

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Also give credit for:	• relevant use of evidence and examples not contained in the data • diagrams • an overall judgement on the issues raised

[25]

6. C

[1]

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8.

The issues identified below are intended to provide an indication of some of the areas which might be discussed. Candidates can only be expected to consider a few of these and / or other issues in the time available.

Issues and areas for discussion include:

Introduction:	• an explanation of the problems in terms of MSC / MSB analysis • a clean environment as a public good • environment can be damaged by market forces (ozone layer, coal tips) • environment can be protected by market forces (property rights / the 'tragedy of the commons') • polluting activities and demerit goods.
Developing a response to the question:	• What markets can do alone, eg ◦ Treat a clean environment as a scarce resource ◦ Supply and demand, price incentives ◦ Assertion of property rights • How markets can be 'nudged' by government, eg ◦ Carbon trading / pollution permits ◦ Road pricing ◦ Taxation (the polluter pays) ◦ Creation of property rights where they do not exist ◦ Creation / assertion of communal / societal rights (eg a right to clean air) • How markets can be 'nudged' by government, eg ◦ Command and control methods ◦ Bans and regulations • command and control versus market based policies
Evaluation:	• market failure and government failure • equity implications of reliance on markets (eg costs and benefits might accrue to different people / groups / countries).
Also give credit for:	• reference to the UK and / or other economies • diagrams

[25]

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10.

For a relevant definition / description of property rights, e.g. a legally recognised right of ownership over a resource; or a definition of market failure.
For explaining how property rights can be lacking, e.g. on common land, on the high seas, in the atmosphere.

Pollution is an example of a negative externality. One failure is the pollution of a communal resource such as a piece of land, a lake or the atmosphere for any one example). Fresh air is a resource essential to life however the atmosphere can also be polluted by human activity. Because nobody owns the atmosphere the costs of pollution are external to the polluter and it is possible for an economic agent to pass these costs on to the wider community.
Another failure is the **depletion** of a communal resource, e.g. water reserves, fish stocks, wildlife, open spaces, and property rights incentivise conservation.
Make appropriate use of diagrams, e.g. an externality diagram.

[9]

11. B

[1]

12. D

[1]

13. Candidates can approach the question with a focus on the UK government or government in general. Either approach can gain full marks. Also, they can focus on ‘externalities’ or wider ‘problems’ of market failure.

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Issues and areas for discussion include:

Introduction	• definitions/descriptions of, eg ◦ externalities ◦ positive and negative • clean water as a merit good • polluted water as a demerit good.
Developing the response to the question (Application)	• relevant use of theory, eg private costs, benefits, social costs, benefits • evidence from the data, eg reference to • pressures on drinking water • lowering of water tables • floods • polluted wells, sanitation • unnecessary waste (bottled water) • costs in terms of oil • private (personal) health benefits of clean water • external health benefits of clean water (avoidance of contagious disease) • environmental issues arising from above points
Developing the response to the question (analysis)	• wider environmental issues, and international comparisons, eg ◦ floods in Bangladesh, drought in southern Spain; ◦ Britain's case of universal drinking water (a result of infrastructure investment over generations). • discussion of water as a private/public/merit good • consequences of different views of the economic nature of water, in terms of government policy, eg • a private good implies privatisation and marginal cost pricing; a public good implies nationalisation and payment out of taxation • a merit good (clean water, good sanitation) implies social benefits exceeding private benefits and under supply/under consumption, and an argument for direct government provision or subsidy • a de-merit good (unfit water, poor sanitation) implies social costs exceeding private costs and over supply/over consumption, and an argument for government action to remove the negative externalities (eg making the polluter pay) • regulation versus de-regulation • policies for supply • policies for use.

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Evaluation	• reasons why market failure/externalities/environmental grounds might be a reason for having a special view of the economics of water; eg water is ubiquitous and a fundamental part of the environment; a basic of life • use of markets to distribute water (eg trade in licences to abstract water) • inequality in buying power, eg utilities can pass costs of buying water along their supply chain to customers; smaller firms, eg farmers, cannot • providing sanitation and clean drinking water cost money, and there is a role for commercialisation (eg there is a debate in the UK about how water should be priced; there is clearly a consumer demand for water in plastic bottles) • balance of advantages and disadvantages of governments regarding water as a merit good • consideration of costs and benefits of, eg ◦ government action ◦ the bottled water industry ◦ alternative uses for water • role of government in general in water-related matters • role of UK government in particular • discussion of whether the UK has consistently regarded water as a 'merit good' ('water and sewerage' businesses have been privatised; however, they have also been strongly regulated) • market failure versus government failure *Examiners should note that, for some of the weaker or average candidates, parts of the above represent quite sophisticated evaluation and so it is important to ensure that more basic evaluation is adequately rewarded where a genuine effort has been made to display that skill.*
Also give credit for	• relevant diagrams • an overall judgement on the issues raised.

It will only be possible for students to consider a few of the above. They may also discuss issues not discussed above.

[25]

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14.

Relevant issues/logical chains of analysis include:

- defining/distinguishing between price elasticity (responsiveness of the quantity demanded to a change in price) and income elasticity of demand (responsiveness of quantity demanded to a change in income)
- (PED) The link between the consumer and price is broken by insurance and the purchasing decision is now taken by the insurance company or by the state or its agent (eg the GP). The patient will want life-saving treatment whatever the price. However some people are not members of insurance schemes or might not qualify for state provision
- assymetric information; unpredictability of medical need
- universal state provision replaces price rationing with the queue (or waiting list) insurance enables people to jump the queue
- (YED) Higher incomes make insurance more affordable
- arguable that people on higher incomes will be more aware of treatments available
- possibility of unnecessary treatments and procedures, e.g. cosmetic surgery for vanity reasons
- meaning of high/low/price/income elasticity
- appropriate use of diagrams, e.g. demand curves related to PED and YED

[10]

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15. **Issues and areas for discussion include:**

Introduction	• Meaning of market failure • Reasons for and examples of market failure, eg ◦ distinction between public and merit goods ◦ positive and negative externalities ◦ public goods, merit goods • Reasons for and examples of government failure.
Developing the response to the question **Application/ Analysis**	• Policy options for public/merit goods ◦ taxation (the ability to pay principle) ◦ charging (the beneficial principle) ◦ subsidies ◦ direct government provision ◦ public/private partnerships • Opportunity cost • Efficiency arguments • Rationale for govt. intervention in providing MSC = MSB, therefore providing a socially optimum level • Consequences of policy options, eg ◦ consumer welfare and producer surplus ◦ national/international competitiveness ◦ prices, employment • Reasons for and examples of government failure • Discussion specific to the local TV station example
Evaluation	• effectiveness of different types of policy • intended and unintended consequences • the option of allowing market forces to work without government intervention (in the local TV case, challenging the apparent view of the minister that there is a 'missing market'); consumer sovereignty arguments) • problems of determining social optimum • market vs govt failure. *Examiners should note that, for some of the weaker or average students, parts of the above represent quite sophisticated evaluation and so it is important to ensure that more basic evaluation is adequately rewarded where a genuine effort has been made to display that skill.*
Also give credit for	• diagrams • an overall judgement on the issues raised • examples.

It will only be possible for students to consider a few of the above. They may also discuss issues not discussed above.

[25]

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18.

Explanation:

For defining/describing externality, e.g. an external effect of production or consumption that spills over into a neighbourhood or community; they can be positive, a benefit, or negative, a cost.

Analysis of positive and negative externalities

For Example

- Positive: good housing gives benefits to the householder in terms of quality of life, but also improves the neighbourhood, and so benefits people other than the householder; if one person improves their house, then its market value will rise; but the neighbourhood's general prices might also increase.
- Positive: Building houses on derelict land improves a whole district
- Negative: bad housing leads to poor health, crime, social disorder, strain on NHS
- Negative: building in the countryside on greenfield sites reduces amenity for others.
- Reward some reference to how government might provide good housing e.g. subsidies, social housing.

Make appropriate use of diagrams, eg MPC, MSC, MPB, MSB

[9]

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19. **Issues and areas for discussion include:**

Introduction	• Description of 'market forces' in housing • Tenures • Subsidies • Intervention methods.
Developing the response to the question: (Application)	• Comments from own economic knowledge or based on the data, e.g. ◦ Supply and demand theory ◦ Relationship between new houses (the flow) and existing houses (the stock). The flow is small in relation to the stock; therefore, house building has little immediate effect on prices. ◦ Data hints that the distinction between social and private housing is muddied (Extract E). Students might mention the bedroom tax (as a 'withdrawal of subsidy') in a relevant way • Further discussion of **Extract D**, e.g.' ◦ Rise in homes owned outright, with fall in mortgages, indicates possible validity of the quote about Germany ◦ Fall in social housing, together with fall in mortgages and rise in private renting indicates right to buy has led to a rentier class rather than a nation of individual owner occupiers. • Tenure and types of housing, **Extract E** • Houses and equality, **Extract F**.
Developing the response to the question: (Analysis)	• Basic reasons why governments of developed countries are involved in provision of housing. • Arguments for intervention, e.g. ◦ market failure ◦ externalities ◦ need for price stabilisation ◦ imperfect information ◦ mobility of labour ◦ income and wealth distribution. • Arguments against, e.g. ◦ rationing/signaling ◦ consumer choice ◦ opportunity costs (pressure on government budgets) ◦ efficiency ◦ problems with government failure, e.g. poor town and country planning.

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Evaluation	• Market failure versus government failure • Consequences of government involvement (e.g. costs to the taxpayer) versus consequences of non-involvement (e.g. costs to the consumer and to society) • Unintended consequences (e.g. Help to Buy being used by private landlords rather than first time buyers) • Discussion of the clear distinction between the flow of newly built houses and the stock of existing houses • Alternatives to house building/'predict and provide', the argument that supply of houses creates its own demand; alternatives (e.g. town centre living) • Critical assessment of the movement from council houses towards private renting, and from directly subsidised rents to the use of housing benefits. *Examiners should note that, for some of the weaker or average candidates, parts of the above represent quite sophisticated evaluation and so it is important to ensure that more basic evaluation is adequately rewarded where a genuine effort has been made to display that skill.*
Also give credit for	• Diagrams • An overall judgement on the issues raised.

It will only be possible for candidates to consider a few of the above. They may also discuss issues not discussed above

[25]

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Mark schemes

1. In this part of the question, candidates will need to demonstrate that they are able to evaluate issues and arguments to support a conclusion if they are to be awarded **more than 15 marks**.

Where there is no **explicit** reference to the data, award a maximum of **21 marks**.

Level 5	**Good analysis <u>and</u> good evaluation**	**22 to 25 marks** *Mid-Point 24 marks*
Level 4	**Good analysis <u>but</u> limited evaluation** **OR** **Reasonable analysis <u>and</u> reasonable evaluation**	**17 to 21** *Mid-Point 19 marks*
Level 3	**Reasonable including some correct analysis <u>but</u> very limited evaluation**	**10 to 16** *Mid-Point 13 marks*
Level 2	**Weak with some understanding**	**4 to 9** *Mid-Point 7 marks*
Level 1	**Very weak**	**0 to 3** *Mid-Point 2 marks*

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Refer also to the issues and areas for discussion on the next page.

Introduction	• Definitions / descriptions of, e.g. • Market forces • Government intervention / regulation
Developing the response to the question: **(Application)**	Comments from own economic knowledge or based on the data, e.g. • Further comments on **Extract A**, (international comparisons of green / non-green energy sources) • Examples from **Extract B** of businesses behaving responsibly, e.g seeking new fuels for aircraft, developing electric cars • Market forces clashing with government predictions, e.g. seeking new oil while wanting to limit climate change **(Extract B)** • Failures of regulation **(Extract C)** • Unsustainable business model **(Extract C)**
Developing the response to the question: **(Analysis)**	Arguments for regulation / intervention e.g. • Market failure • Negative externalities • Inability of markets to make long term predictions • Health and safety issues arising from environmental problems • The need for coordinated international action Arguments for market forces e.g. • Government failure • Efficiency • Competition, enterprise, efficiency • Signalling, incentive, rationing functions of price
Evaluation	• Evaluation of policies in general, e.g. command and control vs. market-focused policies • Evaluation of some specific policies, e.g. prohibitions, regulations, vs. pollution permits, carbon off-setting, taxes, subsidies • Discussion of the quotation (perfectly performing markets vs. wonderfully wise governments) • Consideration of why environmental policies might be good for business and also why it is good for business to respect the environment • Advantages and disadvantages of a mixed economy approach • Market failure versus government failure • Need for privatisation to be accompanied by effective regulation • Discussion of the claim about privatised profits and nationalised costs *Examiners should note that, for some of the weaker or average candidates, parts of the above represent quite sophisticated evaluation and so it is important to ensure that more basic evaluation is adequately rewarded where a genuine effort has been made to display that skill.*
Also give credit for	• Relevant diagrams • An overall judgement on the issues raised.

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It will only be possible for candidates to consider a few of the issues and areas noted. They may also discuss issues not mentioned in the table.

[25]

2. A

[1]

3. D

[1]

4. B

[1]

5. **Areas for discussion include:**

- explaining: permit trading, quotas, environmental taxes, regulation, subsidising green technologies
- effects of emissions trading and alternatives, specifically on UK businesses (firms) in terms of:
  - costs
  - revenues
  - profits
- rationale for government intervention
- internalising externalities and “polluter pays” ideas
- command-and-control versus market-based solutions
- permit/carbon trading schemes in theory and practice
- alternatives and their implications compared and contrasted, e.g. quotas, taxes and subsidising green technologies
- efficacy/appropriateness of ‘offsets’
- possible conflicts between policies, e.g. environmental improvement versus growth and employment
- distortions, e.g. lenient treatment of favoured businesses/industries (mentioned in the data)
- the need for international action
- being ‘carbon neutral’ as a business objective

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the candidate’s response to the question.

[25]

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7.

Level of response	An answer that:	Max 9 marks
3	• is well organised and develops one or more of the key issues that are relevant to the question • shows sound knowledge and understanding of relevant economic terminology, concepts and principles • includes good application of relevant economic principles and/or good use of data to support the response • includes well-focused analysis with a clear, logical chain of reasoning • includes a relevant diagram that will, at the top of this level, be accurate and used appropriately.	**7-9 marks**
2	• includes one or more issues that are relevant to the question • shows reasonable knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present • includes reasonable application of relevant economic principles and/or data to the question • includes some reasonable analysis but it might not be adequately developed and may be confused in places • may include a relevant diagram.	**4-6 marks**
1	• is very brief and/or lacks coherence • shows some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely • demonstrates very limited ability to apply relevant economic principles and/or data to the question • may include some very limited analysis but the analysis lacks focus and/or becomes confused • may include a relevant diagram but the diagram is not used and/or is inaccurate in some respects.	**1-3 marks**

It is expected that a MSC/MSB diagram will be used but a relevant, correctly explained demand and supply diagram is also acceptable.

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Relevant issues include:

- description of property rights, eg a legally recognised right of ownership over a resource
- negative externalities and the spill-over effects on 3rd parties
- why a lack of property rights can lead to negative externalities, ie some costs are not internalised
- the distinction between private optimal outcomes and socially optimal outcomes
- why property rights can be lacking, eg on common land, the high seas, in the atmosphere
- reasons for too rapid depletion of a communal resource, eg water reserves, fish stocks, wildlife, open spaces; property rights incentivise conservation

[9]

10.

Areas for discussion include:

- roads as a scarce resource
- the negative externalities associated with congestion, eg the longer journey times for other road users
- what is meant by road-pricing and how it might be implemented (allow both tolls and congestion charges as forms of road-pricing or as alternative policies)
- other policies that might be employed such as: higher taxes on fuels, increasing the road fund licence, building more roads, subsidising public transport, investing in and improving public transport
- the extent to which roads display the characteristics of a public good and how has this been affected by developments in technology.
- congestion is most prevalent on certain roads and at certain times of the day
- how road-pricing might be implemented, eg charging drivers a price for each mile travelled with different prices for different roads and for different times of the day, perhaps mentioning automatic number plate recognition systems
- setting up tolls on major roads with the toll charge varying between peak and off-peak times
- how higher taxes on fuels would help to reduce congestion and the relevance of price elasticity of demand
- how subsidising, for example, bus and rail transport, will help to reduce congestion and the relevance of cross elasticity of demand
- the budgetary and cost implications of the different options
- possible unintended consequences of the different methods, eg the impact of road pricing on city centres, such as empty shops, higher prices for products as transport costs rise
- equity arguments, eg are indirect taxes regressive, should the road user pay or the taxpayer, the impact of the different policies on the poorest members of society, town versus country dwellers, commuters and businesses
- the likelihood of government failure, eg inadequate information means that the government may set an inappropriate price for using roads, eg a price that doesn't reflect the true cost of congestion, government policy is likely to be affected by public opinion and the reactions of voters.

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the candidate's response to the question.

[25]

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11.

Relevant issues include:

- sources of market failure in transport, eg externalities, roads as a quasi-public good
- examples of externalities associated with journeys by road and rail, eg congestion and longer journey times for other road users, pollution and associated health problems, environmental damage
- explaining why roads may exhibit some of the characteristics of a public good, ie they are, up to a point, non-rival and may be non-excludable.
- why, in the absence of government intervention, the existence of negative externalities means that the user will not bear the full cost of the activity
- free market equilibrium level of output (MPB=MPC) and the social optimum level of output (MSB=MSC)
- negative externalities associated with rail journeys are likely to be less than for journeys by road, hence road journeys will be under-priced by more than rail journeys, ie there will be a greater divergence between the marginal social cost and the marginal private cost for road journeys than rail journeys
- rail companies charge for the use of the rail network but, in most cases, road users are not directly charged for the use of roads
- taxes imposed on the motorist mean that some, or all, of the costs of building and maintaining the road network are borne by the motorist.

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the candidate's response to the question.

[15]

12.

In this part of the question, candidates will need to demonstrate that they are able to evaluate issues and arguments to support a conclusion if they are to be awarded **more than 15 marks**.

Level 5	**Good analysis <u>and</u> good evaluation**	**22 to 25 marks** *Mid-Point 24 marks*
Level 4	**Good analysis <u>but</u> limited evaluation** **OR** **Reasonable analysis <u>and</u> reasonable evaluation**	**17 to 21** *Mid-Point 19 marks*
Level 3	**Reasonable including some correct analysis <u>but</u> very limited evaluation**	**10 to 16** *Mid-Point 13 marks*
Level 2	**Weak with some understanding**	**4 to 9** *Mid-Point 7 marks*
Level 1	**Very weak**	**0 to 3** *Mid-Point 2 marks*

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Issues and areas for discussion include

Introduction	• Definitions, examples ◦ Economic welfare ◦ Merit goods, distinguished from public goods ◦ Asymmetric information ◦ Missing markets
Developing the response to the question: **Application/Analysis**	• Reasons for government provision, e.g. • Positive externalities • Negative externalities • Unequal income distribution • Relative and absolute poverty; unequal life chances • Merit goods ◦ Social objectives : health, education ◦ Economic objectives; infrastructure, efficiency ◦ Equity arguments ('social wages' from public services) ◦ Imperfect information ◦ Missing markets • Public goods ◦ Social or strategic importance (e.g. defence, law & order) ◦ Non-rivalry ◦ Non-diminishable ◦ Non-excludable / pure / non-pure • Arguments for involving markets, e.g. ◦ Efficiency ◦ Competition ◦ Trickle down arguments ◦ Incentive arguments
Evaluation	• Critical discussion of the quotation • Different approaches to ◦ Merit goods and public goods ◦ Different types of merit good ◦ Merit and demerit goods • Is this a really case of either / or? • Can the private sector function efficiently without a public sector (and vice versa) • Can the private sector be trusted to function properly without intervention? • Possibility of public / private partnerships • Money costs and opportunity costs • Real world examples such as public and private transport, primary, secondary, tertiary education; tuition fees versus graduate taxes; public universities, private universities • Overall view of advantages and disadvantages of private and state provision *Examiners should note that, for some of the weaker or average candidates, parts of the above represent quite sophisticated evaluation and so it is important to ensure that more basic evaluation is adequately rewarded where a genuine effort has been made to display that skill.*

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Also give credit for	• Diagrams • An overall judgement on the issues raised • Examples

It will only be possible for students to consider a few of the above. They may also discuss issues not discussed above.

[25]

13. In this part of the question, candidates will need to demonstrate that they are able to evaluate issues and arguments to support a conclusion if they are to be awarded **more than 15 marks**.

Where there is no **explicit** reference to the data, award a maximum of **21 marks**.

Level 5	**Good analysis <u>and</u> good evaluation**	**22 to 25 marks** *Mid-Point 24 marks*
Level 4	**Good analysis <u>but</u> limited evaluation** **OR** **Reasonable analysis <u>and</u> reasonable evaluation**	**17 to 21** *Mid-Point 19 marks*
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Level 2	**Weak with some understanding**	**4 to 9** *Mid-Point 7 marks*
Level 1	**Very weak**	**0 to 3** *Mid-Point 2 marks*

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Issues and areas for discussion include

Introduction	• Definitions / descriptions of, e.g. ◦ Privatisation ◦ Public ownership
Developing the response to the question: **(Application)**	• Comments from own economic knowledge or based on the data, e.g. ◦ Further comments on **Extract A**, (differences / similarities between different governments) ◦ Examples from **Extract B** of privatisations ◦ Dangers of privatisation mentioned in **Extract C**
Developing the response to the question: **(Analysis)**	NOTE There are two aspects to the question: privatisation vs. nationalisation, and domestic ownership vs. international ownership. To achieve Level 5 both aspects must be analysed **and** evaluated. Level 4 can be achieved by a thorough treatment of one aspect, as long as the other is addressed to some extent. • Arguments for nationalisation / against privatisation, e.g. ◦ Externalities ◦ Inability of markets to make long term predictions ◦ Health and safety issues arising from environmental problems ◦ The need for coordinated international action ◦ Merit goods, demerit good, public goods • Arguments for privatisation / against nationalisation, e.g. ◦ Efficiency ◦ Competition, enterprise, efficiency ◦ Signalling, incentive, rationing functions of price • Advantages / disadvantages of international cooperation. • Implications of inward investment; skills / knowledge transfer, comparative advantage vs. self-sufficiency, import substitution
Evaluation	• Evaluation of some specific privatisations, e.g railways, nuclear power, water • Discussion of the quotation (whether the exclusion of British state ownership can be justified if owners are nationalised by their states, or have the backing of a foreign sovereign wealth fund) • Advantages and disadvantages of a mixed economy approach • Market failure versus government failure • Need for privatisation to be accompanied by effective regulation • Globalisation and globalism • Protection vs. free trade; free movement of capital *Examiners should note that, for some of the weaker or average candidates, parts of the above represent quite sophisticated evaluation and so it is important to ensure that more basic evaluation is adequately rewarded where a genuine effort has been made to display that skill.*
Also give credit for	• Relevant diagrams • An overall judgement on the issues raised.

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It will only be possible for candidates to consider a few of the above. They may also discuss issues not discussed above.

[25]

14.

For relevant definitions e.g. imperfect information **(2 marks)**, merit goods **(2 marks)**, demerit goods **(2 marks)**, market failure **(2 marks)** .	**Up to 2 marks per point defined or explained to a maximum of 4 marks**
For explanation – **Award 1 mark** for each step in a logical chain of reasoning **up to 15 marks**.	
Examples include • Poor information **(1 mark)** or asymmetric information **(1 mark)** are among a number of possible reasons for market failure **(1 mark)**. When merit goods are consumed benefits do not stop with the prime consumer **(1 mark)**, but spill over into the neighbourhood **(1 mark)** as positive externalities **(1 mark)**. The consumer will not necessarily be aware of these benefits **(1 mark)** and so will not base spending decisions on this information **(1 mark)**. Since individual consumers under-estimate the social benefits of their consumption, **(1 mark)** merit goods tend to be under-consumed **(1 mark)**. It follows that they are also under-supplied **(1 mark)**. Demerit goods are those where costs do not stay with the consumer **(1 mark)**, but spill over into the neighbourhood **(1 mark)** as negative externalities **(1 mark)** • Imperfect information might affect consumers in the LONG RUN, causing them to demand too much or too little, compared with what they might have consumed if they were fully aware of the future consequences to themselves. • Market signals tell us about what is happening now, they are not adept at foreseeing the future; current market signals might, for instance, tell us to close down an industry, a decision that might be regretted some time later when conditions change (e.g. the policy of closing branch railway lines in favour of roadbuilding in the 1960s)	
Use of diagrams to help support explanations, e.g. short run and long run cost curves.	**Up to 2 marks per diagram (1 mark for labelling, 1 mark for information shown) to a total of 4 marks.**
Relevant real world examples and/or relevant reference to the UK and/or other economies.	**1 mark per reference to a maximum of 2 marks**

[15]

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15.

Areas for discussion include:

- the existence of market failure
- explanation of how taxes reduce consumption
- distinction between specific and ad valorem tax
- the argument that if demand is inelastic, this will result in larger tax revenues which can be put towards public health spending to the same effect
- the extent to which the burden of the sugar tax will be passed on to consumers rather than hitting profits of producers
- the likely extent to which producers change their recipes to avoid the tax
- the fact that the tax only applies to some sugary drinks, and not others (eg milk-based or fruit-based drinks), and does not apply to sugary foods such as chocolate bars
- unintended consequences (positive and negative) which have emerged (or could emerge) from the policy
- alternative policies such as a minimum price per litre, a rationing of quantity, a ban in school vending machines, quantitative limits on the sugar added to drinks in the production process, subsidy for healthier alternatives
- policies to increase uptake of healthier alternatives such as water or milk including information campaigns, subsidies, free school milk, etc.
- whether more prominent labelling (perhaps using a “teaspoon of sugar” measure) is more or less effective
- whether consumer drinks choice is an appropriate area of interference by the Government, or alternatively evidence of the “nanny state”
- whether insights from behavioural economics offer possible solutions, e.g. nudge economics, social norms
- government failure arguments

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the candidate’s response to the question.

Level of response	Response	Max 25 marks
5	**Sound, focused analysis and well-supported evaluation that:** • is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes good application of relevant economic principles to the given context and, where appropriate, good use of data to support the response • includes well-focused analysis with clear, logical chains of reasoning • includes supported evaluation throughout the response and in a final conclusion.	**21 – 25 marks**
4	**Sound, focused analysis and some supported evaluation that:** • is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes some good application of relevant economic principles to the given context and, where appropriate, some good use of data to support the response • includes some well-focused analysis with clear, logical chains of reasoning • includes some reasonable, supported evaluation.	**16 – 20 marks**
3	**Some reasonable analysis but generally unsupported evaluation that:** • focuses on issues that are relevant to the question, showing satisfactory knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present • includes reasonable application of relevant economic principles to the given context and, where appropriate, some use of data to support the response • includes some reasonable analysis but which might not be adequately developed or becomes confused in places • includes fairly superficial evaluation; there is likely to be some attempt to make relevant judgements but these are not well-supported by arguments **and/or** data.	**11 – 15 marks**
2	**A fairly weak response with some understanding that:** • includes some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely • includes some limited application of relevant economic principles to the given context **and/or** data to the question • includes some limited analysis but it may lack focus **and/or** become confused • includes some evaluation which is weak and unsupported.	**6 – 10 marks**
1	**A very weak response that:** • includes little relevant knowledge and understanding of economic terminology, concepts and principles • includes application to the given context which, at best, is very weak • includes attempted analysis which is weak and unsupported.	**1 – 5 marks**

[25]

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16.

For relevant definitions, e.g. commercial success, in terms of trade and profitability **(2 marks)**, market failure, in terms of opportunity costs / externalities **(2 marks)**	**Up to 2 marks per point defined or explained to a maximum of 4 marks**
For explanation – award 1 mark for each link in a logical chain of reasoning to a maximum of 15 marks.	
Possible explanations include • A major international airport, such as Heathrow has multiplier effects on the local economy **(1 mark)**. It is also important to the national economy as a transport hub **(1 mark)**. The airport itself is these days likely to be a private sector enterprise **(1 mark)** and many other private sector organisations (shops, cafes, suppliers, contractors) will benefit from the economic activity **(1 mark)**. If profitable, the whole enterprise will be a significant commercial success **(1 mark)**. However, the government will be expected to provide infrastructure **(1 mark)** with an opportunity cost **(1 mark)**. The taxpayer might not get an adequate return **(1 mark)**. There are also environmental costs **(1 mark)** such as noise, air pollution and road congestion (**1 mark for an example**). Commercial success is measured by profits, whereas externalities and other market failures are difficult to measure **(1 mark)** therefore they can co-exist **(1 mark)**. • An airport, such as Heathrow, as a major employer	
Use of diagrams to support explanations, e.g. Internal / external costs and benefits	**Up to 2 marks per diagram (1 mark for labelling, 1 mark for information shown) to a total of 4 marks.**
Relevant real world examples and/or relevant reference to the UK and/or other economies.	**1 mark per reference to a maximum of 2 marks**

[15]

17. C

[1]

18. B

[1]

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19.

Areas for discussion include:

- analysis of the main sources of air pollution (road vehicles, ships, factories, energy production)
- analysis of the main impacts of air pollution (localised health problems, smog, acid rain, global warming)
- the impact that existing policies have had, eg air passenger duty, fuel excise duty, regulations surrounding emissions (NB Volkswagen scandal), price controls
- explanation of regulation
- the benefits of regulation (simple, easy to change, easier to enforce)
- the costs of regulation (blunt and inefficient tools, create rent-seeking behaviour, unresponsive to changing markets)
- explanation of property rights and how a clear allocation of property rights might help,
- the limitations of property right allocation as an effective policy
    - how the initial allocation of property rights can be extremely problematic
    - how difficult it can be to identify when a right is being breached. For example, if an individual has a right to clean air, how is “clean air” to be defined?
- the success or otherwise of tradable permit systems such as the EU Emission Trading Scheme and the Californian trading system
- explanation of environmental taxation and how it might be applied in this context
- the benefits and costs of taxation
- the international nature of the problem, meaning that interventions taken by individual countries can address localised problems such as smog, but that problems such as global warming require coordinated global action
- examples of successful/unsuccessful regulatory interventions
- whether improved information can be an effective antidote to polluting behaviour
- government failure arguments.

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the candidate’s response to the question.

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Level of response	Response	Max 25 marks
5	**Sound, focused analysis and well-supported evaluation that:** • is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes good application of relevant economic principles to the given context and, where appropriate, good use of data to support the response • includes well-focused analysis with clear, logical chains of reasoning • includes supported evaluation throughout the response and in a final conclusion.	**21 – 25 marks**
4	**Sound, focused analysis and some supported evaluation that:** • is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes some good application of relevant economic principles to the given context and, where appropriate, some good use of data to support the response • includes some well-focused analysis with clear, logical chains of reasoning • includes some reasonable, supported evaluation.	**16 – 20 marks**
3	**Some reasonable analysis but generally unsupported evaluation that:** • focuses on issues that are relevant to the question, showing satisfactory knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present • includes reasonable application of relevant economic principles to the given context and, where appropriate, some use of data to support the response • includes some reasonable analysis but which might not be adequately developed or becomes confused in places • includes fairly superficial evaluation; there is likely to be some attempt to make relevant judgements but these are not well-supported by arguments **and/or** data.	**11 – 15 marks**
2	**A fairly weak response with some understanding that:** • includes some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely • includes some limited application of relevant economic principles to the given context **and/or** data to the question • includes some limited analysis but it may lack focus **and/or** become confused • includes some evaluation which is weak and unsupported.	**6 – 10 marks**
1	**A very weak response that:** • includes little relevant knowledge and understanding of economic terminology, concepts and principles • includes application to the given context which, at best, is very weak • includes attempted analysis which is weak and unsupported.	**1 – 5 marks**

[25]

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20. **Areas for discussion include:**

- explanation of market failure
- sugary drinks as demerit goods leading to over-consumption
- asymmetric/imperfect information problems as consumers may fail to recognise the true costs and benefits of what they consume
- negative externalities in consumption
- examples of negative externalities in consumption arising from sugary drinks
- explanation of the specific health concerns and their burden on the NHS
- concerns about dental hygiene amongst children
- addictive properties of sugary drinks leading to inelastic demand
- reference to 'behavioural' reasons why sugary drinks might be over-consumed, e.g. bounded rationality, bounded self-control, social norms and other cognitive biases
- the tendency to undervalue the long-run consequences of consuming sugary drinks (the overoptimism bias).

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the candidate's response to the question.

Level of response	Response	Max 15 marks
3	**A good response provides an answer that:** • is well organised and develops a selection of the key issues that are relevant to the question • shows sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes good application of relevant economic principles to the given context and, where appropriate, good use of data to support the response • includes well-focused analysis with clear, logical chains of reasoning.	**11 – 15 marks**
2	**A reasonable response provides an answer that:** • focuses on issues that are relevant to the question • shows satisfactory knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present • includes reasonable application of relevant economic principles to the given context and, where appropriate, some use of data to support the response • includes some reasonable analysis but which might not be adequately developed or becomes confused in places.	**6 – 10 marks**
1	**A weak response provides an answer that:** • has identified one or more relevant issues • has some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely • has very limited application of relevant economic principles to the given context **and/or** data to the question • might have some limited analysis but it may lack focus **and/or** become confused.	**1 – 5 marks**

[15]

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21.

Level of response	Response	Max 25 marks
5	**Sound, focused analysis and well-supported evaluation that:** • is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes good application of relevant economic principles and, where appropriate, good use of data to support the response • includes well-focused analysis with clear, logical chains of reasoning • includes supported evaluation throughout the response and in a final conclusion.	**21 – 25 marks**
4	**Sound, focused analysis and some supported evaluation that:** • is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes good application of relevant economic principles and, where appropriate, some good use of data to support the response • includes some well-focused analysis with clear, logical chains of reasoning • includes some reasonable, supported evaluation.	**16 – 20 marks**
3	**Some reasonable analysis but generally unsupported evaluation that:** • focuses on issues that are relevant to the question, showing satisfactory knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present • includes reasonable application of relevant economic principles and, where appropriate, some use of data to support the response • includes some reasonable analysis but which might not be adequately developed or becomes confused in places • includes fairly superficial evaluation; there is likely to be some attempt to make relevant judgements but these aren't well-supported by arguments and/or data.	**11 – 15 marks**
2	**A fairly weak response with some understanding that:** • includes some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely • includes some limited application of relevant economic principles and/or data to the question • includes some limited analysis but it may lack focus and/or become confused • includes some evaluation which is weak and unsupported.	**6 – 10 marks**
1	**A very weak response that:** • includes little relevant knowledge and understanding of economic terminology, concepts and principles • includes analysis which is, at best, very weak • includes attempted evaluation which is weak and unsupported.	**1 – 5 marks**

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Relevant issues and areas for discussion include:

- adequate housing as a basic human need, indicated by the mention of housing as a merit good in **Extract E**
- population growth, leading to more households, outstripping the growth in the UK's housing stock
- different methods of dealing with the problems experienced in the housing market, some of which involve more government spending on housing, eg relaxing planning controls, eliminating other impediments to private sector provision of more houses, making it easier for people to borrow, cutting SDLT, making it more expensive for people to buy and own a second home, discouraging housebuilders from sitting on building land, 'encouraging' local authorities to build more houses, subsidising housing associations, increasing 'housing benefits' paid to people on low incomes, rent controls, measures to encourage the provision of low-cost housing, encouraging innovation and improvements in productivity in the construction of houses
- an assessment of the pros and cons of some of the above
- the impact of more government spending on housing on the budget deficit and the national debt
- the significance of the type of government spending and whether it affects the 'current budget balance' or the overall budget balance, ie ceteris paribus, more capital spending will increase the overall budget deficit but not the current deficit
- the macroeconomic consequences of an increase in the budget deficit and national debt
- possible opportunity cost of an increase in government spending on housing, eg reduced spending on other programmes, higher taxes, crowding out of the private sector
- the case for more government borrowing for capital projects when government borrowing costs are low
- are there sufficient resources, eg construction workers, available to increase the number of houses built?
- increased spending on house building and short-run economic growth, including possible multiplier effects
- increased spending on house building and long-run economic growth
- market failure in the housing market and the possibility that state intervention may result in government failure
- the case for more state provision and ownership of the housing stock versus encouraging more private-sector provision
- should private-sector provision be encouraged by deregulation and relaxing planning controls or by the state giving financial support to the sector and/or homebuyers?
- are measures that make housing more affordable likely to help by encouraging private sector providers to build more homes or are they likely to just bid up house prices, adding to the problem?

Good answers are likely to present and evaluate arguments for and against the government increasing its spending on housing. They are also likely to discuss other methods of dealing with the problems of the UK housing market. The significance of and the impact on the macroeconomy of increasing spending on housing are likely to be considered, as well as possible microeconomic effects of specific policies identified. The response should include a supported recommendation which could be either for or against the government increasing its spending on housing. The recommendation might also include an alternative policy or set of policies.

The use of relevant diagrams to support analysis should be taken into account when assessing the quality of a student's response to the question.

An answer that does not include ANY evaluation must not be awarded more than 13 marks.

[25]

22. **Areas for discussion include:**

- definition of market failure
- distinction between MSB and MPB (allow MSC and MPC)
- explanation of why MPB is greater than MSB
- analysis of the negative consumption (allow production) externalities produced by driving petrol and diesel cars
    - air pollution
    - noise pollution
    - congestion
    - accidents
- why the existence of negative externalities leads to over-production and consumption
- discussion of current government interventions such as licences, speed limits, age restrictions, congestion charge
- information asymmetry problems, for example the fact that diesel cars used to be thought of as cleaner than petrol cars.

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the candidate's response to the question.

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Level of response	Response	Max 15 marks
3	**A good response provides an answer that:** • is well organised and develops a selection of the key issues that are relevant to the question • shows sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes good application of relevant economic principles to the given context and, where appropriate, good use of data to support the response • includes well-focused analysis with clear, logical chains of reasoning.	**11 – 15 marks**
2	**A reasonable response provides an answer that:** • focuses on issues that are relevant to the question • shows satisfactory knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present • includes reasonable application of relevant economic principles to the given context and, where appropriate, some use of data to support the response • includes some reasonable analysis but which might not be adequately developed or becomes confused in places.	**6 – 10 marks**
1	**A weak response provides an answer that:** • has identified one or more relevant issues • has some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely • has very limited application of relevant economic principles to the given context **and/or** data to the question • might have some limited analysis but it may lack focus **and/or** become confused.	**1 – 5 marks**

[15]

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23. **Areas for discussion include:**

- explanation of market forces and government intervention
- acknowledgement of recent rapid growth in the supply of waste
- discussion of the global market for waste, with waste from the rich world being shipped to parts of the developing world, where lower-cost labour makes sorting cost-effective and there is greater demand for second-hand materials
- discussion of how the 'collect, sort, export" model has been threatened by China's decision to effectively ban imports of some types of waste'
- explanation of how rich countries, by moving away from manufacturing and into service sectors, have effectively outsourced production to developing countries, thus exporting some of the environmental problems too
- explanation of the 'circular economy' and how it differs from the current market model of supply and demand
- how there are economic benefits to circularity as well as costs (eg job creation)
- discussion of possible policies at the national level
    - regulations
    - taxation of raw material inputs
    - subsidies
    - permits and quotas
    - forcing producers to pay for disposal of products
- discussion of problems with the above policies, including feasibility, effectiveness and cost
- the likely uneven impact across different sectors of introducing policies to promote circularity
- explanation of how international agreement may be necessary given the global nature of the problem and discussion of how such international agreements are slow to achieve and often fail to address problems identified
- discussion of EU targets for national governments to improve their recovery rates
- how the market may respond to lower waste prices via rationing, signalling and incentive effects: for example, automation may replace human sorters at waste plants, and online markets for second-hand raw materials may develop
- market failure arguments
- government failure arguments.

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the student's response to the question.

Level of response	Response	Max 25 marks
5	**Sound, focused analysis and well-supported evaluation that:** • is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes good application of relevant economic principles to the given context and, where appropriate, good use of data to support the response • includes well-focused analysis with clear, logical chains of reasoning • includes supported evaluation throughout the response and in a final conclusion.	**21 – 25 marks**
4	**Sound, focused analysis and some supported evaluation that:** • is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes some good application of relevant economic principles to the given context and, where appropriate, some good use of data to support the response • includes some well-focused analysis with clear, logical chains of reasoning • includes some reasonable, supported evaluation.	**16 – 20 marks**
3	**Some reasonable analysis but generally unsupported evaluation that:** • focuses on issues that are relevant to the question, showing satisfactory knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present • includes reasonable application of relevant economic principles to the given context and, where appropriate, some use of data to support the response • includes some reasonable analysis but which might not be adequately developed or becomes confused in places • includes fairly superficial evaluation; there is likely to be some attempt to make relevant judgments but these are not well-supported by arguments and/or data.	**11 – 15 marks**
2	**A fairly weak response with some understanding that:** • includes some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely • includes some limited application of relevant economic principles to the given context and/or data to the question • includes some limited analysis but it may lack focus and/or become confused • includes attempted evaluation which is weak and unsupported.	**6 – 10 marks**
1	**A very weak response that:** • includes little relevant knowledge and understanding of economic terminology, concepts and principles • includes application to the given context which, at best, is very weak • includes attempted analysis which is weak and unsupported.	**1 – 5 marks**

[25]

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24.

Level of response	Response	Max 25 marks
5	**Sound, focused analysis and well-supported evaluation that:** • is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes good application of relevant economic principles and, where appropriate, good use of data to support the response • includes well-focused analysis with clear, logical chains of reasoning • includes supported evaluation throughout the response and in a final conclusion.	**21 – 25 marks**
4	**Sound, focused analysis and some supported evaluation that:** • is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes good application of relevant economic principles and, where appropriate, some good use of data to support the response • includes some well-focused analysis with clear, logical chains of reasoning • includes some reasonable, supported evaluation.	**16 – 20 marks**
3	**Some reasonable analysis but generally unsupported evaluation that:** • focuses on issues that are relevant to the question, showing satisfactory knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present • includes reasonable application of relevant economic principles and, where appropriate, some use of data to support the response • includes some reasonable analysis but which might not be adequately developed or becomes confused in places • includes fairly superficial evaluation; there is likely to be some attempt to make relevant judgements but these aren't well-supported by arguments and/or data.	**11 – 15 marks**
2	**A fairly weak response with some understanding that:** • includes some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely • includes some limited application of relevant economic principles and/or data to the question • includes some limited analysis but it may lack focus and/or become confused • includes some evaluation which is weak and unsupported.	**6 – 10 marks**
1	**A very weak response that:** • includes little relevant knowledge and understanding of economic terminology, concepts and principles • includes analysis which is, at best, very weak • includes attempted evaluation which is weak and unsupported.	**1 – 5 marks**

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Relevant issues and areas for discussion include:

- explanation of what is meant by the zero-emissions target
- why further government action might be needed to ensure the target is achieved by 2050
- explanation of policies that the UK government could introduce to reduce emissions, examples include: carbon taxes, pollution permits, regulations, subsidies for technologies that reduce GHG emissions, carbon border tax
- the advantages and disadvantages of individual policies
- some policies may shift production that causes GHG emissions to other countries, eg in Asia or Africa
- whether policies should focus on consumption instead of, or as well as, production
- the costs of policies to reduce GHG emissions for particular industries/sectors of the economy
- the benefits of policies to reduce GHG emissions for particular industries/sectors of the economy
- opportunities to develop 'new industries' in growing markets and create export opportunities
- the role of market forces in reducing GHG emissions
- the impact on short-run and long-run growth
- the impact on employment and unemployment
- the impact on inflation
- the impact on the balance of payments
- possible regional effects
- effects on the distribution of income, eg some policies may be regressive
- short-run versus long-run effects
- role of moral and political judgements
- judgements relating to the relative merits of different policies
- the significance of the global nature of the climate change problem
- consideration of the case for and against not taking any further action
- a supported recommendation in favour of a particular policy/set of policies/or to take no further action.

The use of relevant diagrams to support analysis should be taken into account when assessing the quality of a candidate's response to the question.

An answer that does not include any evaluation or a supported recommendation must not be awarded more than 13 marks.

[25]

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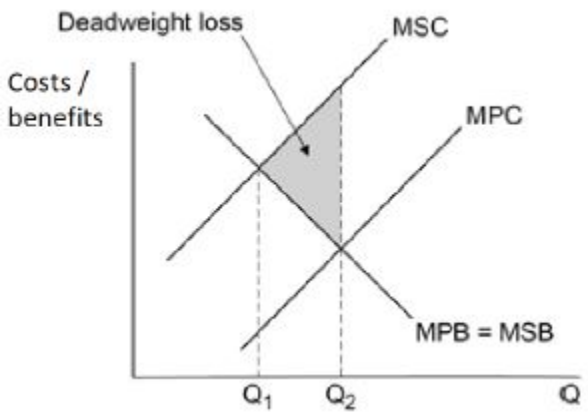
25.

Level of response	Response:	Max 9 marks
3	• is well organised and develops one or more of the key issues that are relevant to the question • shows sound knowledge and understanding of relevant economic terminology, concepts and principles • includes good application of relevant economic principles and/or good use of data to support the response • includes well-focused analysis with a clear, logical chain of reasoning • includes a relevant diagram that will, at the top of this level, be accurate and used appropriately	**7 – 9 marks**
2	• includes one or more issues that are relevant to the question • shows reasonable knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present • includes reasonable application of relevant economic principles and/or data to the question • includes some reasonable analysis but it might not be adequately developed and may be confused in places • may include a relevant diagram	**4 – 6 marks**
1	• is very brief and/or lacks coherence • shows some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely • demonstrates very limited ability to apply relevant economic principles and/or data to the question • may include some very limited analysis but the analysis lacks focus and/or becomes confused • may include a relevant diagram but the diagram is not used and/or is inaccurate in some respects.	**1 – 3 marks**

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Suggested diagram

An MSC/MSB externality diagram is expected, showing overproduction as a result of a negative externality in production. However, a demand and supply diagram illustrating overproduction resulting from a negative externality is also acceptable.



An externality diagram showing negative consumption externalities is also acceptable. The written response should relate appropriately to the chosen diagram.

Relevant issues include:

- definition of market failure
- explanation of diagram, showing over-production of goods due to the marginal external costs creating a divergence between marginal social cost and marginal private cost. The over-production of goods creates a deadweight loss
- explanation of why output in a free market will be where MPC=MPB, whereas the socially optimal output is where MSC=MSB
- explanation of economic (in)efficiency
- explanation of how firms have an incentive to make products short-lived, as such products are likely to be made with cheaper raw materials, less quality control and perhaps cheaper labour
- how designing products to fail may result in more sales in the future
- how the actions of producers are normally not constrained by any requirements to consider how products are disposed of at the end of their useful life
- how disposal of waste products via landfill or incineration imposes externalities on third parties
- analysis of what such externality impacts are and who pays for them
- how the rapid utilisation of scarce resources such as minerals, water, oil, accelerates the degradation of the environment and reduces the quantity available for the future
- how such environmental problems might be considered allocatively inefficient
- reference to extracts, including the fact that not only producers, but also transport companies and others benefit from the overproduction of goods.

[9]

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