

Mark Scheme (Results)

June 2011

GCSE Citizenship 5CS03/3A Environmental change and sustainable development Edexcel is one of the leading examining and awarding bodies in the UK and throughout the world. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers.

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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

3

5CS03_3A June 2011

Question	Answer	Mark
Number		
1	A	1
		_
Question Number	Answer	Mark
2	С	1
Question Number	Answer	Mark
3	D	1
		,
Question Number	Answer	Mark
4	В	1
	1	
Question Number	Answer	Mark
5	A	1
Question Number	Answer	Mark
6	С	1
		I
Question Number	Answer	Mark
7	D	1

Question Number	Answer	Mark
8	 Allow one mark for each point (max 2) e.g. Reduce fossil fuel use (by improving home insulation) Using public (rather than private) transport Using energy-efficient light bulbs Not leaving electrical goods / PCs or TVs on 'standby' overnight Cycle rather than use public transport Walk rather than use public transport Purchase more high energy efficient appliances (eg washing machines/fridges) Use car pooling Generally reduce the use of household appliances Turn off lights when not in use Use alternative power sources eg solar power Marks may be awarded for other examples if relevant. 	2

Question Number	Answer	Mark
9	Only advantages and disadvantages from Source D (listed below) can be credited. Award one mark for a potential advantage (max 1) e.g. • Uses waste that would otherwise go to landfill • It is a very special kind of recycling • It produces 2% of UK electricity •enough to power more than 2 million homes • It helps the UK meet its targets for renewable energy • Less waste will go into landfill sites • Less likely to be opposed by NIMBY campaigners • Less carbon dioxide in atmosphere Award one mark for a potential disadvantage (max 1) e.g. • (May lead to the) cutting down of rainforest • May use land previously used for growing crops, (causing prices to rise) • May result in food shortages / hunger / death	2

Question Number	Answer	Mark
10	Allow one mark for each 'biggest change' suggested (max 3) eg • people from many towns/villages will need to be relocated • people/family die/missing • likely to over-crowding, less places to live • much of the country will be fragmented into islands/journeys will become more difficult • transport disrupted, fewer transport opportunities • Business and employment likely to be heavily disrupted/fewer jobs • national infrastructures e.g. electricity or gas grids may be useless • some will have been made homeless, more homes required, fewer homes available • there may be a recession • roads and infrastructure in cities and towns will need re-building • delivery of goods and food will be difficult leading to shortages • Marks may be awarded for other examples if relevant. Give marks for both immediate and long term changes.	3

Question 11 – Indicative content

Acceptable points could include the following practical steps to increase recycling rates:

- separate bins for glass, paper, cans, garden waste etc
- more conveniently located collection points
- charges/fines for those who do not sort out their waste/use recycling bins.
- better education/information/advertising about recycling
- use of ethnic languages to spread information about recycling
- higher priority to be given to recycling by councils
- the heat from biomass burning could be used to heat/power nearby homes/ shops/workplaces

Marks may be awarded for any other relevant points.

Level	Mark	
0	0	The answer does not seriously address the question.
1	1-2	The answer offers just 1 or 2 very simple points without any development.
2	3-4	The answer makes 2 or 3 points but they are fairly superficial with limited explanation.
3	5-6	Well developed points supported by simple but acceptable examples with clear explanation.

Question	Answer	Mark
Question Number 12(a)	Award one mark for each clearly different point made (max 2) e.g. • 'Not In My Backyard' (NIMBY) campaigners may claim that the views from their homes may be spoiled/ their homes lose value etc • those employed in fossil-fuel industries (eg coal) may not want their jobs to be lost • people might prefer non-green transport • people might resent being told what to do/ nanny state • some may not want to sort waste into different categories for recycling • fossil fuels are cheaper and easier to obtain • renewable energy sources are seen to be expensive (for the customer) • renewable energy is seen to be too costly an investment for the country • There is still money to be made from fossil fuel production, companies want to remain in business • People take the short term view/we may not live to enjoy the benefits.	2 2
	Marks may be awarded for any other relevant points.	

Question Number	Answer	Mark
12(b)	Award one mark for each clearly different response offered (max 2) e.g. creates new jobs urgent need to tackle global warming, climate change is happening now will help to improve things for future generations will help to meet national/international commitments/targets fossil fuels causing extensive environmental harm it will be cheaper in the long run as cost/price of fossil fuels rise it will lead to less pollution and less harm to the environment/better for the planet fossil fuels are finite, they will run out it will lead to far less fossil fuel use and more renewable energy use Marks may be awarded for any other relevant points.	2

Question	Answer	Mark
Number		
13	 Allow 1 mark for each different point made (max 3) eg little publicity is given to methane in the media most emphasis (in teaching/media) is placed on carbon dioxide global warming has long been associated with carbon dioxide, eg cars are a much more obvious cause of pollution difficult to see how the dangers of methane emissions can be reduced, the solutions are not as clear as they are for CO2 to reduce the methane emissions, it may be necessary to get people to eat less meat/ unpopular message tackling the 'methane' problem might have bad effects on British agriculture there is little understanding of methane gas and its effect on global warming it is a relatively new issue we are producing larger amounts of carbon dioxide and so the focus is it even though methane gas is potentially more damaging We are not aware of the relative impact of carbon dioxide and methane, eg The impact of a car as compared with a cow There is not as much that we as individuals can do about methane Animals not traditionally thought of as major polluters Marks may be awarded for any other relevant points.	3

Question 14 – Indicative content

Candidates are likely to make points such as the following:

Points for selling/cutting down rainforests

- Countries with rainforests are free to develop it as they wish.
- Some developing countries have suggested that if they are not to exploit their rainforest, they should be paid/compensated by developed countries.
- It is understandable that in countries where land is scarce or not very fertile, farmers should wish to cut down forest to increase land supply.
- The same factors apply in the case of government policy (eg Argentina and Brazil) where governments want to increase beef exports.
- Countries with rainforest are not immune from climate change which may adversely affect their farming as well as the rainforest itself.

Points against selling/cutting down rainforests

- Countries with rainforest need to recognise its global importance (to offset global warming and climate change).
- Short-term gain may lead to long-term disadvantage.
- Rare species in rainforests need protection.
- Many scientific discoveries are made from vegetation and animal life in rainforest too important to lose
- There are ethical reasons why the needs of others should not be ignored.

Level 0	0 marks	No rewardable material
Level 1	1-2 marks	Basic and/or very brief approach – relying on opinion with basic knowledge and little understanding of the issue.
Level 2	3-4 marks	An approach which relies on opinion but with limited relevant evidence and some knowledge and understanding of the issue. Students who give only one point of view (either for or against) are limited to a maximum of 4 marks
Level 3	5-6 marks	An approach covering both points of view and which uses some evidence to develop limited arguments and demonstrates quite good knowledge and understanding.
Level 4	7-8 marks	A balanced approach covering both points of view and which uses clear evidence to support arguments and demonstrates good knowledge and understanding.

11

Question 15 (includes QWC) - Indicative content

POINTS SUGGESTING MEDC'S SHOULD SOLVE THE PROBLEMS....

- They did create the problems initially and exploited u/dev countries
- They have more capacity and capability to solve the problems
- They should through international agreements set higher targets
- They need to support LEDCs to make changes

ALTERNATIVELY...

- Some LEDC's eg China and India are the highest polluters
- They need to not simply follow the models of MEDCs
- LEDC's have a global responsibility to take action
- International agreement and joint action is required

• International agreement and joint action is required				
Level 1	1-3 marks	Opinion with little or no reasoning, showing simple knowledge and little understanding of issues and/or events. There are some errors in spelling, punctuation and grammar but the basic meaning is clear.		
Level 2	4-6 marks	Opinion with limited reasoning, supported by limited relevant evidence and/or examples showing basic knowledge and understanding of issues and/or events. Students who include ONLY points for, or ONLY points against are restricted to a maximum of 6 marks. Spelling, punctuation and grammar are reasonably accurate and meaning is clear.		
Level 3	7-9 marks	Points FOR and AGAINST are included in a simple but reasonably effective discussion which shows some knowledge and understanding of some issues and/or events. Spelling, punctuation and grammar are mostly accurate and appropriate language is used to convey meaning.		
Level 4	10-12 marks	Points FOR and AGAINST are included in a mainly balanced and reasoned discussion which shows quite good knowledge and understanding of issues and/or events, based on evidence/argument and leading towards a conclusion. Spelling, punctuation and grammar are accurate & appropriate language is used together with some use of specialist terms		
Level 5	13-15 marks	Points FOR and AGAINST included in a balanced, reasoned and coherent discussion which shows good knowledge and understanding of issues and/or events, supported by strong evidence and arguments leading to a reasoned conclusion. Fluent and consistently strong use of vocabulary and accurate spelling, punctuation and grammar with use of specialist terms.		

12 5CS03_3A June 2011

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