Mark Scheme (Results)

June 2024

Pearson Edexcel GCSE
In Geography (1GB0) Paper 3

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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.

Question Number	Answer	Mark
1(a)(i)	Andes Mountains / Andes / Mountains	(1)

Question Number	Answer	Mark
1(a)(ii)	C 75,000 km2 Clearly a five figure number; largest bloc about 250x250 + other southern areas.	(1)

Question Number	Answer	Mark
1 (a)(iii)	Award 1 mark for a basic suggested reason and 1 mark for further explanation, up to a maximum of 2 marks. For example: • Rainforest(s) cannot grow in the mountains (1) because it is too cold (1) • Rainforest(s) cannot grow in the mountains (1) because the slopes are too steep (1) • Rainforest(s) cannot grow in the mountains (1) because the thermal growing season is too short (1) • Rainforest(s) cannot grow in the mountains (1) because there is a lack of nutrients in the soil (1) • Rainforest(s) cannot grow in low lying coastal regions (1) where soils are too waterlogged (1) Do not credit: • Human reasons such as urbanisation Accept any other appropriate response.	(2)

Question Number	Answer	Mark
1(b)(i)	D 2016 Clearly the year with the highest loss of tropical rainforest– all others are lower	(1)

Question Number	Answer	Mark
1 (b)(ii)	In each case, award 1 mark for a basic reason based on Figure 2, and 1 mark for further explanation, up to a maximum of 4 marks. The resource offers two ideas in the two bullet points below the graph – specifically ' the cutting down of forests...' and secondly 'climate change...'. The graph shows that all types of forest have declined since 2001 Allow 1 mark for each Figure 2 based basic point which can then be developed through their own knowledge and understandiing for a second mark. Reasons and explanations may include: • All types of forest are being cut down to provide resources (1) for example logging for timber in the taiga (1) • Trees may not survive in areas where climate change means temperatures / rainfall are changing (1) because biomes are adapted to particular climates (1) • In turn, grasslands or other biomes might expand onto areas that were forest (1) because they can tolerate drier or hotter conditions (1) Accept any other appropriate response.	(4)

Question Number	Answer	Mark
2(a)(i)	7 (US$ billion) So 3.5 = half the estimated area so x2 therefore 7bn	(1)

Question Number	Answer	Mark
2(a)(ii)	D Rationale – this is a typical characteristic; there is little seasonality in true rainforest regions. A incorrect – rainfall is high all year B and C incorrect – both statements suggest marked seasons, which is not typical.	(1)

Question Number	Answer	Mark
2 (b)(i)	Answer = 29.3% Two ways of doing this 1. 70.7 are members so 29.3 are not 2. 17/58 x 100 = 29.3 Allow 29 (question does not specify to one decimal point' Do not insist on %	(1)

Question Number	Answer	Mark
2(b)(ii)	A - Preventing trade of endangered plant and animal species All other answers self-evidently wrong	(1)

Question Number	Answer	Mark
2 (c)	In each case, award 1 mark for a reason based on Figures 3 and 4, and 1 mark for further explanation, up to a maximum of 4 marks. Strength • An opportunity for richer countries to work with poorer countries protect their forest (1) for example Norway donated US$5 m to REDD (1) • REDD and CITES both promote the sharing of advice (1) helping countries like Ecuador to generate new ideas about how to redcue deforestation (1) Weakness • The amounts of money provided by richer countries are not enough to stop deforestation (1) Norway is the main donor for REDD and only gave 5 million US$ (1) • The value of Ecuador's oil is billions of dollars (1) which is vastly more than the 5 million US$ that Norway has given to REDD (1) Accept any other appropriate response(s) which must be based on Figure 3 or Figure 4..	2 2 (4)

Question Number	Answer	Mark
3 (a)(i)	Fish and seafood Accept 'Fish' Accept 'Sea food'	(1)

Question Number	Answer	Mark
3 (a)(ii)	B Rationale – 18 million growing at 1.4% a year so 18x1.4 /100 252,000 thus 18.25 is closest. A incorrect C incorrect D incorrect	(1)

Question Number	Answer	Mark
3 (b)(i)	Floods / flooding / flood costs / Covid / pandemic/volcanic eruptions/ natural disasters	(1)

Question Number	Answer	Mark
3 (b) (ii)	In each case, award 1 mark for a reason based on Figures 5 and 6, and 1 mark for further explanation, up to a maximum of 4 marks. Explanation should focus on why energy use doubled 2001-2021 while population grew by only one-third. For example: • GDP per person has risen from 1000 to 6000 US% (1) and this means that each person has more income to buy things that use energy (1) • Ecuador may be expanding its export businesses (1) for example fishing fleets might need more energy than in the past (1) Allow • During COVID more people worked from home (1) adding to energy demand (1) Accept any other appropriate response. Do not credit: answers arguing that the increased use of energy is due to more people. The figure shows that energy use is growing faster than the population.	(4)

Question Number	Answer	Mark
3 (c)	In each case, award 1 mark for a basic reason and 1 mark for further explanation or development, up to a maximum of 4 marks. For example: • HEP involves flooding of valleys (1) leading to loss of distinctive local natural features / landscapes (1) • HEP involves construction of dams (1) which are usually concrete which is one of the 'dirtiest' products in terms of carbon emissions (1) • HEP involves construction of dams (1) which results in the flooded of valleys (1) • Solar power plants may lead to loss of large areas of natural vegetation (1) and biodiversity loss (1) • Wind power requires turbines to be built (1) with negative visual imapct on wilderness landscapes / views (1) or birds killed (1) Allow answers that only address one type of renewable energy e.g HEP. We have not asked them for two dfferent types of renewable energy but two different impacts. Accept any other appropriate response. Do not award credit for the names of renewable energy sources without a basic landscape impact	(4)

3 (d)	AO3 (4 marks)/AO4 (4 marks) Answers should address the threats posed by the oil industry which are shown or written about in Figures 7 and 8. The assessment may offer a view of which threat is most severe/concerning, and why. AO4 (skilled use of information from Figures 7 and 8) • Cutback of wide and long strips of forest to lay pipes and build roads. • Soil excavation to lay pipelines, and linked soil erosion. • Loss of rare bird, mammal and tree species e.g. jaguar, pygmy marmoset; oil spills might threaten the dolphins. • Only parts of the parks have full protection (shown by map). • Threatened way of life for Tagaeri and Taromenane forest communities. • Secondary threats from loggers and hunters who access the forest where the oil companies have cleared land A03 (making connections and /or arguments) • The *most worrying* threat is biodiversity loss because it also *in turn* has global implications due to the genetic resource that is lost (makes links/connections). • The *most serious* environmental impacts are caused by forest clearance for infrastructure. • Not only does forest clearance destroy habitats, it also *in turn* allows poachers to access the forest (makes links/connections). • Forest removal leads to more loss of tropical soil as they are *interdependent* on one another − the damage become *permanent* as forest cannot regrow. • The threats are *unlikely to reduce* because 40% of the country's oil lies there. • There are threats and injustices for the park's human communities too, *made worse* by confrontations with loggers.

Level	Mark	Descriptor
	0	No acceptable response
Level 1	1–3	Attempts to apply understanding to deconstruct information but understanding and connections are flawed. An unbalanced or incomplete argument that provides limited synthesis of understanding. Judgements are supported by limited evidence. (AO3) Uses some geographical skills to obtain information with limited relevance
Level 2	4–6	Applies understanding to deconstruct information and provide some logical connections between concepts. An imbalanced argument that synthesises mostly relevant understanding but not entirely coherently, leading to judgements that are supported by evidence occasionally. (AO3) Uses geographical skills to obtain accurate information that supports some
Level 3	7–8	Applies understanding to deconstruct information and provide logical connections between concepts throughout. A balanced, well-developed argument that synthesises relevant understanding coherently, leading to judgements that are supported by evidence throughout. (AO3) Uses geographical skills to obtain accurate information that supports all aspects of the argument. (AO4)

Question Number	Answer	Mark
3 (e)	Award 1 mark each for mention of any two of the following, up to a maximum of 2 marks: • Protest • March • Legal case / law case / legal battle • Blocking of roads • Violence Allow `working with oil firms Allow - Ecotourism	(2)

Question Number	Answer	Mark
3 (f) (i)	Award 1 mark each for mention of any two of the following, up to a maximum of 2 marks: • Shale gas or Fracking gas • Shale oil • Tar sands • Tight gas • Deepwater oil Allow `shale` but NOT in combination with either `shale gas` or `shale oil` or `fracking` Credit all other valid names.	(2)

3 (f)(ii)	AO3 (4 marks)/AO4 (4 marks) Answers should address whihc countries / groups of countries are most and least resposible for the 2,000 GT historical emssions mentioned in Figure 10. The assessment may offer an overview of how unequal the percentages are. AO4 (skilled use of information from Figure 10) • Developed countries are responsible for more than half (58.5%) • Developing countries are responsible for just one-tenth (10.4%) • China has emitted as much carbon as all other emerging countries (15%) • Ecuador has emitted 0.1% or 1/1000 of all carbon. • The data stretches back to 1750 and so may not be wholly reliable. • The data are described as 'industry and fossil fuel' only – not deforestation. A03 (making connections and /or arguments) • The high percentage recorded for developed countries shows they are *overwhelmingly to blame*, especially the USA. • The developing and emerging countries where most of the world's people live have contributed *very little overall*. • The data do not show population sizes, meaning that disparities will be even greater still if viewed as *emissions per person*. • Not all people *within a particular country* may be responsible for high emission, as Ecuador's rainforest communities show us. • The data do not show the *links and connections* created by global trade which could make some country's contributions even higher. • The time frame used is 1750-present, and some countries may have been more responsible for emissions over shorter *time scales in the past or present*.

Level	Mark	Descriptor
	0	No acceptable response
Level 1	1–3	Attempts to apply understanding to deconstruct information but understanding and connections are flawed. An unbalanced or incomplete argument that provides limited synthesis of understanding. Judgements are supported by limited evidence. (AO3) Uses some geographical skills to obtain information with limited relevance and accuracy, which supports few aspects of the argument. (AO4)
Level 2	4–6	Applies understanding to deconstruct information and provide some logical connections between concepts. An imbalanced argument that synthesises mostly relevant understanding but not entirely coherently, leading to judgements that are supported by evidence occasionally. (AO3) Uses geographical skills to obtain accurate information that supports some aspects of the argument. (AO4)
Level 3	7–8	Applies understanding to deconstruct information and provide logical connections between concepts throughout. A balanced, well-developed argument that synthesises relevant understanding coherently, leading to judgements that are supported by evidence throughout. (AO3) Uses geographical skills to obtain accurate information that supports all aspects of the argument. (AO4)

Q	Indicative content
4	AO2 (4 marks)/AO3 (4 marks)/AO4 (4 marks) In order to fully justify a choice, the candidate must consider all three options and establish a clear argument. There is no preferred option. All options can be justified. Option 1 − Ask other governments again− this was previously attempted in 2007. But climate change is now a more urgent issue and other countries might be more prepared to act. All Ecuador's people may suffer in the long-term due to climate change. Option 2 − Ecuador has contributed very little to climate change and perhaps it is only fair for the country to profit from its resources while it can - provided local harm is minimised and all communities share the profits. Option 3 − This is a compromise position that allows some oil to still be exploited. However, it is an option that no one may be particularly happy with as it would impact negatively on Ecuador's economy and society - unless other measures are in place too. A02 (applied understanding) • Biodiversity, habitats and ecosystem life-support services can be protected if the forest is preserved (option 1). • We need to move quickly to a sustainable energy future based on renewables and recyclable sources, not business as usual fossil fuel use (option 1) • Emerging countries have rising GDPs and levels of consumption, but have yet to match the affluence of developed countries − and oil money can help (option 2) • Boserup's theory suggests that technological innovation and fixes for climate change will arise through necessity (option 2) • There are other economic models Ecuador might follow to diversify its economy while running down the oil industry, such as ecotourism, (option 3) • It is vital that national parks are fully protected, otherwise rainforests will be lost for future generations (option 3) A03 (use of argument) • Development and growth decision-making has social, economic and environmental strands which complicates the evaluation of all three options. • There are short-term and longer-term futures to consider. Using oil in the short-term could mean longer-term hardship for all people as climate change intensifies. • There are issues of inequality and injustice to consider, because it is vital that all of Ecuador's people, including rainforest people, benefit from the chosen option. • Ecuador's choices should be evaluated in a global context - it is unfair if Ecuador's people cannot profit from its fossil fuels in the way other countries have historically. • There are links and connections to consider, such as the way that Option 1 allows other countries to benefit by showing their commitment to mitigation. • Whatever option is chosen, there is complexity and uncertainty. Many details will need to be worked out, such as how Option 1 would be delivered. AO4 (use of evidence) • Ecuador's economy has grown over time, but it is burdened greatly by debt and needs a strong and reliable source of income (Introduction, Figure 4, Figure 6). • Ecuador has other economic sectors it could develop such as seafood, fishing and bananas (Figure 5). • Extreme weather possibly linked with climate change has previously harmed Ecuador's economy (Figure 6). • Oil exploration is hugely damaging to the biodiverse rainforest and contributes to high deforestation rates (Figure 2, Figure 7, Figure 8). • Rainforest communities are increasingly taking action to make sure their rights and needs are recognised as an important part of national decision-making (Figure 9). • Ecuador has contributed just 0.1% of global emissions to date (Figure 10).

Level	Mark	Descriptor
Level 1	1–4	• Demonstrates isolated elements of understanding of concepts and the interrelationship between places, environments and processes. (AO2) • Attempts to apply understanding to deconstruct information but understanding and connections are flawed. An unbalanced or incomplete argument that provides limited synthesis of understanding. Judgements are supported by limited evidence. (AO3) • Uses some geographical skills to obtain information with limited relevance and accuracy, which supports few aspects of the argument. (AO4)
Level 2	5–8	• Demonstrates elements of understanding of concepts and the interrelationship between places, environments and processes. (AO2) • Applies understanding to deconstruct information and provide some logical connections between concepts. An imbalanced argument that synthesises mostly relevant understanding but not entirely coherently, leading to judgements that are supported by evidence occasionally. (AO3) • Uses geographical skills to obtain accurate information that supports some aspects of the argument. (AO4)
Level 3	9-12	• Demonstrates accurate understanding of concepts and the interrelationship between places, environments and processes. (AO2) • Applies understanding to deconstruct information and provide logical connections between concepts throughout. A balanced, well-developed argument that synthesises relevant understanding coherently, leading to judgements that are supported by evidence throughout. (AO3) • Uses geographical skills to obtain accurate information that supports all aspects of the argument. (AO4)
Marks for SPGST		

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Performance	Marks	Descriptor
SPaG 0	0	*No marks awarded* □ Learners write nothing. □ Learner's response does not relate to the question. □ Learner's achievement in SPaG does not reach the threshold performance level, for example errors in spelling, punctuation and grammar severely hinder meaning.
SPaG 1	1	*Threshold performance:* □ Learners spell and punctuate with reasonable accuracy. □ Learners use rules of grammar with some control of meaning and any errors do not significantly hinder meaning overall. □ Learners use a limited range of specialist terms as appropriate.

SPaG 2	2–3	*Intermediate performance* • Learners spell and punctuate with considerable accuracy. • Learners use rules of grammar with general control of meaning overall. • Learners use a good range of specialist terms as appropriate.
SPaG 3	4	*High performance* • Learners spell and punctuate with consistent accuracy. • Learners use rules of grammar with effective control of meaning overall. • Learners use a wide range of specialist terms as appropriate.

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