Mark Scheme (Results)

Summer 2018

Pearson Edexcel GCSE

In Geography B (1GB0/03)

Paper 03: People and Environment Issues –
Making Georaphical Decisions

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
1a	The number of species / how many species there are OR The diversity/variety/types/kinds /number of life/organisms/animals & plants (must have both) **Accept any other appropriate response.**	**1**

Question number	Answer	Mark
1bi	India	**1**

Question number	Answer	Mark
1bii	A (1950-1970) [it grew from 70m to 120m and 120-70 = 50m] *B incorrect because it grew from120m to 180m = 60m* *C incorrect because it grew from180m to 240m = 60m* *D incorrect because it grew from 240m to 293m = 53m*	**1**

Question number	Answer	Mark
1ci	**2015**	**1**

Question number	Answer	Mark
1cii	Award 1 mark for a general point about a population's greater wealth / purchasing power /development leading to increased water use / demand; and a further 1 mark for some expansion (related to either why demand is rising, or what the demand is for), up to a maximum of 2 marks. • More people have higher incomes so use more water (1) for example running home appliances / paying water bills / accessing clean water / buying bottled water / dishwashers (1) • As the national economy has developed (1) there are more businesses using water (1) **Accept any other appropriate response.**	**(2)**

Question number	Answer	Mark
1d	Award 1 mark for a basic point and a further mark for explanation up to a maximum of 2 marks. New technologies (may give example) means that resources will not run out (1), and these have been developed *because current resource limits / population pressure is recognised* (1) When population grows new resources are created / discovered (1) *because of a larger pool of innovative people /scientists* (1) **Accept any other appropriate response.**	**(2)**

Question number	Answer	Mark
2a	Award 1 mark for any identified change in the pattern up to a maximum of 3 marks. • Less forest overall (1) • Less forest in Asia (may give details) (1) • Less forest in Africa (may give details) (1) • Less forest in Americas (may give details) (1) • Less on/near Tropic of Cancer (may give details) (1) • Less on/near Tropic Capricorn (may give details) (1) • Very little change / some loss at /on equator (1) • Changes in named countries (credit each country) (1) **Accept any other appropriate response.**	**(3)**

Question number	Answer	Mark
2bi	C US$800 million [because they have recived 200m of a possible 1000m abnd 1000-200 = 800m] *A incorrect because the only correct answer is 200m* *B incorrect because the only correct answer is 200m* *D incorrect because the only correct answer is 200m*	**1**

Question number	Answer	Mark
2bii	In each case, award 1 mark for a basic explanation of a specific global action, and 1 mark for further expansion, up to a maximum of 2 marks. • CITES / Convention on International Trade in Endangered Species of Wild Fauna and Flora stops animal trade (1) which helps protect endangered species (1) • REDD / Reducing Emissions from Deforestation and Forest Degradation provides funding / payments (1) which results in forest being set aside / protected (1) Other possibilities may include RAMSAR (mangrove), some UNESCO sites, G7/20/other global governance actions Suggestions explanation of how forest can be saved (global scale is implied only) may gain 1 mark each up to a maximum of 2 marks e.g. more national parks / protected areas / afforestation / planting schemes. **Accept any other appropriate response.**	**2+2** **(4)**

Question number	Answer	Mark

3ai	Award 1 mark for working for an appropriate way of calculating and award a further 1 mark for correct answer up to maximum 2 marks.
	
	Possible workings:
	
	    • 868 ÷ 100 x 15
	    • 868 x 0.15
	    • (868 ÷ 10) + (868 ÷ 10)/2
	
	Correct answer (must have one decimal place only): **130.2**
	
	Maximum of one mark if no working out is shown.
		1
		
		1
		
		(2)

Question number	Answer	Mark
3aii	Award 1 mark for identifying relevant evidence and 1 mark for an explanation of the link with a nation's economic or development status Around one quarter / the largest part / 26% of GDP is generated by manufacturing sector (1) showing that the country is industrialising / no longer developing country (1) 7% of GDP comes from financial services (1) showing that the economy is starting to mature (1) Agriculture / mining still significant / important / clearly present showing it is not yet a developed country Significant Utilities/ construction (1) so still in development (1) Hotels and restaurants are significant / important / 13% suggesting it is not a developing country **Accept any other appropriate response.**	**(2)**

Question number	Answer	Mark
3b	In each case, award 1 mark for the basic reason identified and further marks for explanation, up to a maximum of 2 marks. More space needed (1) to manufacture these palm oil products (so rainforest cleared) (1) Indonesia's climate is suited to both palm oil and rainforest (1) leading to widespread burning/clearance by companies (1) Very profitable activity (1) for companies who grow / process the palm oil products (1) Weak environmental laws (1) make it relatively easy for palm oil companies to clear the rainforest (1) **Accept any other appropriate response.**	**2 + 2** **(4)**

Question number	Answer	Mark
3c	Award 1 mark for a basic reason and one mark for expansion, up to a maximum of 2 marks. A higher oil price means consumers switch / turn to palm oil (1) which means biofuel / palm oil prices likely to rise (1) Both prices could rise together if total global demand changes (1) e.g. recovery after 2008-09 financial crisis or other events (1) **Accept any other appropriate response.**	**(2)**

Question number	Answer	Mark
3d	For each reason, award 1 mark for a basic reason and one mark for expansion, up to a maximum of 2 marks. Prices in Figure suggests falls could be triggered by peaks (1) showing commodity prices can rise / fall in cycles (1) Consumers may seek out / be attracted to alternative energy sources (1) so oil producers lower prices to lure them back (1) Prices fall in 2012 might be because supply increased (1) for instance due to political decisions by oil producers to increase output (1) Prices fall in 2008 might be because demand fell (1) which may be linked to world events / happened in the global financial crisis (1) **Accept any other appropriate response.** For the award of full marks, answer must include some analysis of the information provided.	**2+2** **(4)**

Question number	Indicative content
3e	**AO3 (4 marks)/AO4 (4 marks)**

Answers should focus on the environmental impacts caused by different energy resources and in so doing may make an assessment of their severity, long-term impacts, etc.

A03

- Overview of impacts: there are a range of impacts but overall they are all negative.
- Assessment of (relative) severity / importance of impacts: e.g. forest fires could be seen as most damaging because environment / society gg/ economy all harmed
- Irreversible impacts: which makes them especially serious e.g. biodiversity losses (orangutans), forest cannot regrow (because soil has gone too).
- Reversible impacts: may assess the degree to which some negative impacts could be tackled /reversed e.g. afforestation
- Linked impacts: pollution in some places affects other places too due to air and water currents; river pollution may have knock on effects for coastal and marine ecosystems; linked impacts and connections: some environmental impacts are serious because of their implications for health/people/economy
- Contrasting impacts: different parts of Indonesia suffer from different types of energy resource development including onshore and offshore pollution; some impacts affect the landscape, others affect water supply, air pollution and consequentially impacts on ecosystems and biodiversity.

A04

- The orangutans are critically threatened and may not be brought back from the brink in Sumatra (Figure 9)
- Only 7,500 Sumatran orangutans remain (Figure 9)
- Smoke pollution from Sumatra has affected not just other parts of Indonesia but other countries too e.g. Singapore (Figure 9 and Figure 6)
- Half of rivers in Kalimantan are at risk from water pollution from coal mining though we do not know how badly they are affected (Figure 9)
- Widespread coal mine landscape scarring (Figure 9)
- Soil have been eroded (Figure 9) which makes it hard to restore biodiversity

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)

Question number	Indicative content
3f (i)	Award 1 mark for a basic reason and one mark for expansion (containing either explicit or implied link with carbon reduction), up to a maximum of 2 marks.
	Higher income countries may invest more in renewable energy / solar power / wind turbines / nuclear (1) and avoid fossil fuels (1)
	Educated consumers are aware of issues and buy locally (1) and reduce food miles (1)
	Accept any other appropriate response.

	Indicative content
3f (ii)	**AO3 (4 marks)/AO4 (4 marks)**
	Answers should focus on why different groups **have different views on who is most to blame** for deforestation.
	AO3
	• One reason - perhaps the most important - is that deforestation is a complex problem, as the booklet shows, so it is hard to identify a single culprit.
	• Another reason is there are private, public, local and global forces at play, so no-one in particular can be singled out.
	• Perspectives differ on who to blame due to partial knowledge of the bigger issues e.g. indigenous people may blame local companies not the firms they supply (and who they know less about).
	• Indigenous people may not view their own small-scale burning of forest as blameworthy because they do not appreciate the scale of the problem they contribute to.
	• Each group can blame the next 'linked' group e.g. companies can say the blame lies 'upstream' with the consumers who drive demand.
	• People who see the 'big picture' might say the government of Indonesia is really to blame for not passing and upholding stricter laws to protect the environment.
	AO4
	• Pressure groups say consumers everywhere are to blame because they are putting pressure on companies to stop burning forest. (Figure 10)
	• Norway's government blames Indonesia's government because it has seen how much more was done in Brazil. (Figure 10)
	• Forest experts blame companies for not reusing land sustainably and clearing more forest instead. (Figure 10)
	• Some palm oil companies want to help the environment. They blame the government for working with companies that care less. (Figure 10)
	• Local villagers blame the companies who have ruined their efforts to develop ecotourism. (Figure 10)
	• Government officials think that villagers want to develop economically. (Figure 10)

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)

	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 alternative options and establish a clear argument about the meaning of 'best for people *and* the environment'.
	There is no prefered option. All options can be justified. The balance of the case will vary according to the option chosen.
	• Option 1 can be justified by suggesting that this is the best compromise. Companies can reuse land if they want to but they are not currently forced to do so. This would stop further forest and biodiversity loss and also stop people being harmed by smoke from fires. • Option 2 can be justified by suggesting that the environment is already so degraded, and orangutans endangered, that the best option must involve some restoration. This could be best for people too if ecotourism can be developed. • Option 3 can be justified by suggesting that economic development must be the priority for poorer people in Indonesia. It may be possible to find fixes for environmental problems such as reafforestation and breeding programmes for orangutans. **A02**
	• Tropical rainforest are important global carbon sinks and should be protected • Tropical rainforests have high biodiversity which should be protected • Palm oil is needed by industries that might otherwise use fossil fuel • Burning forest creates smoke pollution which is harmful to people's health • Palm oil companies create employment and wealth for local people • Rural villages in Indonesia need to develop economically **A03**
	• The 'best' option should meet both environmental and socio-economic goals equally, or in a relatively balanced way. • The 'best' option is one which takes the long view and thinks about more than short-term economic growth. • It is important to think globally as well as locally when deciding what is best for people and the environment. • Some people might view the developmental needs of communities as being of greater importance than orangutans • Some people might view climate change as the most important issue affecting both people and the environment today and in the future. • The population-resource relationship is complicated, and stronger government and new technologies must be part of the equation. **A04**
	• Some communities in Sumatra and Kalimantan still need to use wood as their main fuel source because they lack alternatives (introduction). • Indonesia's population is growing larger and wealthier (Figures 1 and 2). • Stopping forest loss would unlock one billion dollars of Norwegian money (Figure 4). • Forestry is less than 15% of the economy and now less important than manufacturing and services (Figure 5). • There are only 7.500 Sumatran Orangutans left (Critically Endangered). • Air pollution killed in 1997 and workers are exposed to pesticides (Figure 9).

Level	Mark	Descriptor
	0	No rewardable material.
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 that 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. (A04)
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		
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.