

Mark Scheme (Results)

Summer 2016

Pearson Edexcel GCSE Geography B (5GB3F/01)

Unit 3: Making Geographical Decisions

### **Edexcel and BTEC Qualifications**

Edexcel and BTEC qualifications are awarded by Pearson, the UK's largest awarding body. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information visit our qualifications websites at <a href="http://qualifications.pearson.com">http://qualifications.pearson.com</a> or <a href="http://qualifications.pearson.com/contactus">www.btec.co.uk</a>. Alternatively, you can get in touch with us using the details on our contact us page at <a href="http://qualifications.pearson.com/contactus">http://qualifications.pearson.com/contactus</a>

### Pearson: helping people progress, everywhere

Our aim is to help everyone progress in their lives through education. We believe in every kind of learning, for all kinds of people, wherever they are in the world. We've been involved in education for over 150 years, and by working across 70 countries, in 100 languages, we have built an international reputation for our commitment to high standards and raising achievement through innovation in education. Find out more about how we can help you and your students at: <a href="https://www.pearson.com/uk">www.pearson.com/uk</a>

# **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.

### Placing a mark within a level mark band

• The instructions below tell you how to reward responses within a level. Follow these unless there is an instruction given within a level. However, where a level has specific guidance about how to place an answer within a level, **always** follow that guidance.

### 2 mark bands

Start with the presumption that the mark will be the higher of the two. An answer which is poorly supported gets the lower mark.

### 3 mark bands

Start with a presumption that the mark will be the middle of the three. An answer which is poorly supported gets the lower mark. An answer which is well supported gets the higher mark.

#### 4 mark bands

Start with a presumption that the mark will be the upper middle mark of the four

An answer which is poorly supported gets a lower mark.

An answer which is well supported and shows depth or breadth of coverage gets the higher mark.

- Mark schemes will indicate within the table where, and which strands of QWC, are being assessed. The strands are as follows:
  - i) ensure that text is legible and that spelling, punctuation and grammar are accurate so that meaning is clear
  - ii) select and use a form and style of writing appropriate to purpose and to complex subject matter
  - iii) organise information clearly and coherently, using specialist vocabulary when appropriate.

### **Spelling, Punctuation and Grammar Marking Guidance**

- The spelling, punctuation and grammar assessment criteria are common to GCSE English Literature, GCSE History, GCSE Geography and GCSE Religious Studies.
- All candidates, whichever subject they are being assessed on, must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Spelling, punctuation and grammar marking criteria should be applied positively. Candidates must be rewarded for what they have demonstrated rather than penalised for errors.
- Examiners should mark according to the marking criteria. All marks on the marking criteria should be used appropriately.
- All the marks on the marking criteria are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the marking criteria.
- Examiners should be prepared to award zero marks if the candidate's response is not worthy of credit according to the marking criteria.
- When examiners are in doubt regarding the application of the marking criteria 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.
- Handwriting may make it difficult to see if spelling, punctuation and grammar are correct. Examiners must make every effort to assess spelling, punctuation and grammar fairly and if they genuinely cannot make an assessment, the team leader must be consulted.
- Specialist terms do not always require the use of complex terminology but the vocabulary used should appropriate to the subject and the question.
- Work by candidates with an amanuensis, scribe or typed script should be assessed for spelling, punctuation and grammar.
- Examiners are advised to consider the marking criteria in the following way:
  - o How well does the response communicate the meaning?
  - o What range of specialist terms is used?
  - o How accurate is the spelling, punctuation and grammar?

Question Number	Correct Answer	Reject	Marks
1(a)(i)	<b>B</b> the number and variety of plants and animals.	All other answers.	(1)

Question Number	Correct Answer	Reject	Marks
1(a)(ii)	<b>D</b> when extinction rates are very high	All other	(1)
		answers.	

Question Number	Correct Answer	Reject	Marks
1(a)(iii)	<b>B</b> plants	All other	(1)
		answers.	

Question	Correct Answer	Reject	Marks
Number			
1(a)(iv)	C an area with a very large number of	All other	(1)
	plant and animal species.	answers.	

Question Number	Correct Answer	Reject	Marks
1(a)(v)	<b>A</b> mostly in the developing world	All other	(1)
		answers.	

Question Number	Correct Answers	Marks
1(b) (i)	Faster than normal (1) 100 times (1)	<b>(2</b> ) 1+1
	Faster than normal (1) 30,000 a year and/or 3 per hour (1)	
	Bees disappearing (1) which pollinate many other crops and a key element in the food chain (1)	
	Many endangered species (1) data to support (Figure 1a) (1)	
	Scientists say it is (1)	

Question Number	Correct Answer(s)	Marks
1(b) (ii)	More changes in their environment (1) example of same, e.g. pollution of freshwater (1)	<b>(2)</b> 1+1
	Higher up the food chain (1) therefore more vulnerable (1) example of same, e.g. whales/phytoplankton (1)	
	Habitat being lost (1) example of same, e.g. tigers in the Sunderbans (1)	
	Some habitats more sensitive than others to change e.g. live in a niche or isolated environment (1) which is very fragile and/or example offered e.g. coral reefs (1)	
	Some species are hunted/fished (1) because needed for food and/or sale value and/or other legitimate use (1)	
	More at risk from climate change (1) because they are unable to adapt quickly (1)	
	Live in a 'hotspot' (1) example or development of same (1)	
	Any other acceptable response	

Question	Correct Answer	Reject	Marks
Number			
2(a)	D = Species Introduction and Habitat	All other	(1)
	Destruction cause 75%	answers	

Question Number	Correct Answer	Reject	Marks
2(b) (i)	A = the high projection is 3.5 billion higher than the low projection.	All other answers	(1)

Question Number	Correct Answers	Marks
2 (b) (ii)	Difficult to predict impact of economic growth (1) on birth and or death rates (1)	<b>(2)</b> (1+1)
	Because changes in birth rate and/or death rate (1) because of changes in need for children/contraception etc. (1)	
	Forecasting is inherently uncertain (1) example of same (1)	
	Human habits and behaviour change (1) which impacts in turn on birth and/or death rates (1)	
	Because there might be a major catastrophe (1) detail of same – pandemic such as Ebola (1)	

Question Number	Correct Answer	Reject	Marks
2(c) (i)	B = Africa	All other answers	(1)

Question Number	Correct Answers	Reject	Marks
2 (c) (ii)	Quite a number to choose from. Likely choices include:	More food is needed	<b>(2)</b> 1+1
	Loss of habitat (1) because more land to provide more non-food resources and/or food and/or housing and living space (1)		
	More demand for protein (1) therefore overfishing (1)		
	Displaced people (1) might be forced to hunt for more food (1)		
	Might correspond with biodiversity hot spot (1) so risk of extinction (1)		
	Allow any other acceptable reason for 'threat'		
Question Number	Correct Answers	Reject	Marks
2 (c) (iii)	To grow crops (1) for the global market (1)  Land is cheap(er)(1) so larger profits (from exporting both food and non-food crops) (1)  Labour is cheap (1) so land bought to	Consequences of land purchases	<b>(2)</b> (1+1)
	develop industries and/or mining (1)		
	Allow any reasonable choice		

Question Number	Correct Answer	Marks
2 (c) (iv)	Answers need to address spatial 'some areas more than others' and then suggest legitimate reason why it is more serious in that region/area/specific location.	(4) (1+1) + (1+1)
	Because they have more species/are hotspots (1) detail example of same (1)	
	Because they are more easily damaged/fragile (1) example of same – mountains (1)	
	Because they are closer to populated areas (1) therefore more vulnerable (1)	
	Because they are tourist destinations (1), example of same – coral reefs in Jamaica (1)	
	Because they have faster economic growth (1) so more pressure on resources (1)	
	Between there are varied (political/government) attitudes to conservation/preservation (1) example of same or extension through detail (1)	
	Any legitimate basic reason (1) extension through detail of process or example of appropriate place (1)	

Question	Correct Answer	Reject	Marks
Number			
2(d) (i)	<b>D</b> developing countries will grow faster	All other	(1)
	than developed countries.	answers	

Question Number	Correct Answers	Reject	Marks
2 (d) (ii)	Because greater wealth means more money to buy goods (1) example of same, e.g. cars (1) which may affect particular resource e.g. oil/non-renewables (1)	Ideas that misunderstand resources	<b>(2)</b> (1+1)

Question Number	Correct Answers	Marks
2 (e) (i)	<b>C</b> the richest 20% consume much more than the other 80%	(1)

Question Number	Correct Answer	Reject	Marks
2 (e) (ii)	Any two from  Europe (1)  North America (1)  Asia (1)	All other answers including 'America'	<b>(2)</b> 1+1

Question Number	Correct Answer	Marks
2 (e) (iii)	Poor health care and or education(1) for the majority (1)  Social unrest/high crime rates (1) because of deprivation/anger etc. (1)	<b>(2)</b> (1+1)
	Migration (1) seeking better jobs/employment (1)  Any legitimate <b>social</b> impact (1) with development through example or development of process (1)	

Question Number	Correct Answer	Reject	Marks
3 (a)	The population that the earth/an area can support (1) before experiencing major problems of resource shortages (famine, war etc.) (1)	All other answers	<b>(2)</b> 1+1

Question Number	Correct Answer	Marks
3 (b)	Population increases (rapidly) so resources exhausted and/or carrying capacity reached idea (1) so collapse occurs	(4)
	(1) detail of collapse e.g. famine and war (1) detail of	(1+1)
	resources e.g. food, crops etc.	+
		(1+1)
	Carrying capacity never reached (1) it changes with new	
	technologies (1) because population growth stimulates	Or
	innovation (1) example of same e.g. Green Revolution (1)	(1+1+
		1)+1

Question Number	Correct Answers	Marks
4 (a)	A Most people would protect the environment even if it costs jobs and would pay higher prices for food and other goods	(1)

Questi on Numb er	Correct Answer	Reject	Marks
	Basic recognition of a group/category who take a particular view e.g. poor/rich, developed/developing, urban/rural (1) explanation of why this results in a particular view (1) allow example or extension for 3 <sup>rd</sup> mark (1)  For example;  The poor worry about redoing incomes (1) because they have less money (than the rich) (1)  Urban populations care less about the environment (1) because they never/rarely leave the city (1)  They might also approach it from a different point of view e.g. how bad the environment is; for example;  The environment is very poor in some countries (1) which makes people more aware/worried (1) example of same, e.g. India/China (1)  or	Answers that simply describe the data	(4) (1+1)+(1 +1) Or (1+1+1) +1
	Government commitment/education varies from place to place/time to time (1) raising awareness (1) example of same. e.g. South Korea in recent years (1)		

Question Number	Indicative content
5	Candidates will use the RB and their K and U from Units 1 and 2.
QWC i-ii-iii	All three options offer plenty of room for discussion. Any of the options could be considered; there are no preferred/better options. Candidates are asked to 'make a case' which does not compel them to address the other two options although some may and should be rewarded for so doing. However a well-argued case that does not address the other options should be:
	<ul> <li>Broadly, decide levels as follows.</li> <li>Simple, undeveloped statements are limited to Level 1, e.g. 'Option 1 might create more wealth'. Level 1 also applies to a single developed point without further comment.</li> <li>Developed statements start the road to Level 2/3. A single well–developed point can be Level 2 for 3 marks, e.g. 'Option 2 will address the rate of resource use, e.g. oil'</li> <li>An answer can reach the top of Level 3 using three developed points (e.g. from the factors below). Exceptionally, two well-developed points can take a response to the top of Level 3 irrespective of the third point.</li> </ul>
	<ul> <li>Advantages of Option 1 include the following:         <ul> <li>Reversing or simply arresting population growth is a possible debate here</li> <li>Slowing down population growth rate might buy some time</li> <li>Fewer people means less resources consumed (assuming economic growth does not increase!)</li> <li>This will reduce pressure on the environment</li> <li>Developed through examples which might involve food, water and/or energy drawn from either RB or from K and U</li> <li>Developed through material covered in Battle for the Biosphere, e.g. coral reefs</li> <li>Theory might be revisited especially the Boserupian graph in Figure 3 – this might be dismissed as wildly optimistic</li> <li>This can only happen if the UN low prediction is correct</li> </ul> </li> <li>Allow:         <ul> <li>It is better than the alternatives – not so many disadvantages and developments of same</li> </ul> </li> <li>Advantages of Option 2 include the following.</li> </ul>
	<ul> <li>Reducing or reversing economic growth is a possible debate here</li> <li>Slower economic growth will simply slow down but not reverse damage to biosphere but might buy some time</li> <li>This will reduce pressure on the environment</li> <li>Developed through examples which might involve food, water and/or energy drawn from either RB or from K and U</li> </ul>

- Developed through material covered in Battle for the Biosphere,
   e.g. coral reefs
- Might also address inequalities which complicate the idea of economic growth economic growth for who?

#### Allow:

• It is better than the alternatives – not so many disadvantages and developments of same

## Advantages of Option 3 include the following:

- We have never run out of any resource
- Examples of same from flints to coal(?)
- Expansion of Boserupian argument we will always find a way examples from past
- Research has helped before, e.g. GM crops
- Expect suggestions of possible solution, e.g. hydrogen economy
- Population growth a good thing because it stimulates change
- Economic growth a good thing because it provides money for research

### Allow:

• It is better than the alternative – not so many disadvantages and developments of same

Level	Mark	Descriptor
Level 0	0	No acceptable response
Level 1	1-3	States at least one simply stated advantage, but these are described without detail, e.g. 'It will help save the environment. Points likely to be 'lifted' straight out of the RB, without comment or qualification. No obvious case made. Limited structure to answer and basic use of geographical terminology.
Level 2	4-6	Sound description of at least one advantage in some detail using evidence drawn largely from RB, e.g. 'This will allow more time for other improvements to take place'. Clear attempt to explain why there is a positive effect on the environment drawing for RB and K and U from Units 1 and 2 as in 'this would help preserve the rainforest, a vital carbon sink'. Some structure, clearly communicated but with a limited use of geographical terminology.
Level 3	7-9	Good description of at least two advantages using evidence form RB and own Knowledge and Understanding from Units 1 and 2 to develop statements fully, e.g. 'Researching new food production techniques such as GM crops has increased production and will continue to do so and some new technologies will reverse biosphere decline'. Strong attempt to explain positive impacts of this option, importing good K and U from Units 1 and 2 as in. 'coral reefs will decline less quickly if we find new technologies for carbon capturing'. Clear structure, well communicated and with a good use of geographical; terminology.

SPaG Level 0	0	Errors severely hinder the meaning of the response or candidates do not spell, punctuate or use the rules of grammar within the context of the demands of the question.
SPaG Level 1	1	Threshold performance Candidates spell, punctuate and use the rules of grammar with reasonable accuracy in the context of the demands of the question. Any errors do not hinder meaning in the response. Where required, they use a limited range of specialist terms appropriately.
SPaG Level 2	2	Intermediate performance Candidates spell, punctuate and use the rules of grammar with considerable accuracy and general control of meaning in the context of the demands of the question. Where required, they use a good range of specialist terms with facility.
SPaG Level 3	3	High performance Candidates spell, punctuate and use the rules of grammar with consistent accuracy and effective control of meaning in the context of the demands of the question. Where required, they use a wide range of specialist terms adeptly and with precision.