



Mark Scheme (Results)

November 2021

Pearson Edexcel GCSE B in

Geography (1GB0)

Paper 02 - UK Geographical Issues

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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.

Paper 2 Mark Scheme – 1GB02 (2021)

Question	Answer	Marks
1(a)	C – Chalk All other answers clearly mistaken – see diagram Figure 1	(1)

Question	Answer	Marks
1(b)	C – the breakdown or dissolving of rocks on the surface All other answers clearly and demonstrably wrong	(1)

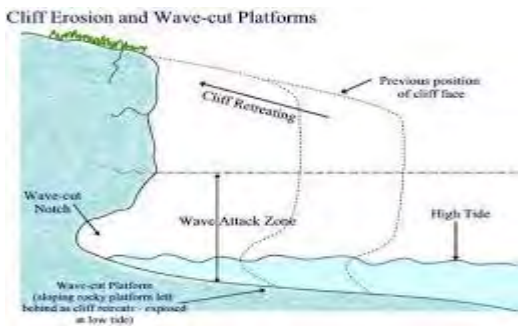
Question	Answers	Marks
1(c)	Award one mark for identifying an appropriate characteristic that makes sedimentary rock more readily erodible or why igneous rock is more resistant and a further mark for an extension/development of that idea. Not as hard (1) because more compressed (1) More bedding planes/joints (1) so more access for water etc. (1) Chemically less resistant to solution (1) for example chalk and limestone s (1) Accept any other appropriate response	(2)

Question	Answer	Marks
2(a)(i)	B – Yorkshire and Humberside All other answers clearly and demonstrably wrong	(1)

Question	Answer	Marks
2(a)(ii)	$6.6 \times 11,154/100 = 736.16$ so 736.2 (km) One mark for correct method – one for the result Allow 736.1	(2)

Question	Answer	Marks
2(a)(iii)	Award one mark for identifying an appropriate reason why a small percentage of Scottish coastline is protected and a further mark for a legitimate development of that point. Much of the coastline is made up of hard, resistant rocks (1) so erosion rates are very low without protection (1) Much of the coastline is experiencing uplift (1) so it is advancing and not retreating (1) Much of the coastline is very lightly populated (1) making protection expensive and pointless (1)	(2)

	There is a great deal of coastline to protect (1) so only a small proportion is likely to need and/or warrant protection Accept any other appropriate response	
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Question	Answer	Marks
2(b)	<p>Award one mark for an appropriate basic explanation of coastal erosion creating cliffs (1) and a further 3 marks for its development (1)</p> <p>Waves erode the coastline with hydraulic energy and abrasion (1) exploiting weaknesses in the lithology/structure of the rocks (1) leading to the undercutting of the cliff (1) leading to rockfall and/or slumping due to gravity (1) development of cliffs and their retreat over time (1) these processes can be exacerbated by weathering (1)</p> <p>Diagram will be version of below:</p>  <p>Limit to three if sequence is not apparent</p> <p>Do not credit twice if diagram/text replicate each other</p> <p>Accept any other appropriate response</p>	<p>(4)</p> <p>(1) + (1+1+1)</p>

Question	Answer	Marks
3 (a) (i)	<p>D – a meander</p> <p>All other answers demonstrably wrong – see Figure 3</p>	(1)

Question	Answers	Marks
3 (a) (ii)	<p>Because it is higher than point X (1) evidence from contour line and/or spot height (1)</p> <p>Accept any other appropriate response</p>	<p>(2)</p> <p>1+1</p>

Question	Answer	Marks
3(b)	<p>One mark for each basic reason (1) and a further mark for its development (1)</p> <p>Building on floodplains reduces infiltration because grass/farmland replaced by tarmac and/or concrete (1) and so more water reaches the river leading to peakier discharge (1)</p> <p>Removal of trees reduces the amount of water taken up by plant growth (1) which leads to more water reaching the river (1)</p> <p>Climate change has led to more extreme events which includes greater storminess (1) which delivers more rain in shorter periods leading to flooding as ground becomes saturated (1)</p> <p>Accept any other appropriate response</p>	<p>(4)</p> <p>(1+1) + (1+1)</p>

Question	Indicative content
4	<p style="text-align: center;">AO3 (4 marks) / AO4 (4 marks)</p> <p>AO3 (4 marks)</p> <ul style="list-style-type: none"> • The general relationship is largely explained by the impact of altitude on climate and the thermal growing season • Exacerbated by poorer soils which are in many areas partly .. • ..a function of their glacial history as in the Highlands of Scotland and Wales • Lowland densities reflect soil fertility at a local level but also accessibility and human factors. • These last include the impact of the industrial revolution and accessibility • Coastlines are also important for a trading nation <p>AO4 (4 marks)</p> <ul style="list-style-type: none"> • There is a close relationship between topography and population density • In all the >600metre areas population density is very low – frequently between 0 and 0.2 per hectare • That is also true for some (100 – 600 metres) lower altitudes e.g. Dartmoor and Exmoor are clearly visible on the pop density map • However, the relationship is not so clear at low altitudes and certainly not at <100 metres • There are many low latitude areas with minimal relief that have low population density – examples are most obvious in East Anglia and Lincolnshire • Others have very high density

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	<ul style="list-style-type: none"> 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. (AO4)
Level 2	4–6	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	Marks
5 (a) (i)	B – they are most extreme for those aged between 35 and 65 All other answers demonstrably mistaken – see Figure 5	(1)

Question number	Answerextree	Marks
5 (a) (ii)	The mean is distorted by extreme values (1) so doesn't fairly reflect the population and/or the middle value is better in those circumstances (1) Accept any other appropriate response	(2)

Question number	Answer	Marks
5 (b)	Award one mark for basic reason and a second through an extension which might be an application of that idea. Increasing jobs in some sectors (1) because of inward investment e.g. Nissan, Tata (1) Loss of jobs in other sectors (1) as companies off-shore production/services (1) Growth of London as a financial centre through TNCs in the banking sector (1) so more foreign banks established here (1) Accept any other appropriate response	(4) (1+1) + (1+1)

Question number	Answer	Marks
6 (a) (i)	D = in eight cities more people feel safe than unsafe All other responses demonstrably wrong – see Figure 6	(1)

Question number	Answer	Marks
6(a) (ii)	10 values – so between 5 th and 6 th – so 32 and 34 = 33 One mark for correct result – one for legitimate working.	(2) (1+1)

Question number	Answer	Marks
6 (b)	<p>Much depends on the chosen city (expect London and Birmingham to dominate)</p> <p>Award one mark for outlining a relevant explanatory point about the impact of migration and a second mark for the development of that idea.</p> <p>It has changed the ethnic diversity of the city given contrasts with resident population (1) and so introduced many different cultures (1) such as Brick Lane's many changes over recent years (1)</p> <p>It has led to rapid population growth with many new arrivals (1) leading to some strain on services (1) such as education and transport (1)</p> <p>It has led to regeneration of some inner-city areas as student populations have grown (1) changing demand for services and pushing up rents (1)</p> <p>Migrants tend to be young so changing the age-structure and rate of natural increase (1) leading to further growth (1)</p> <p>Do not expect specific demarcation between national and international migration</p> <p>Allow 3+1 but the points must be explanatory</p> <p>Accept any other appropriate response</p>	<p>(4)</p> <p>(1+1) + (1+1)</p> <p>or</p> <p>(1+1+1) + 1</p>

Question number	Answer	Marks
6 (c)	<p>Much depends on the chosen city (expect London and Birmingham to dominate)</p> <p>Award one mark for outlining a basic explanatory reason and a further mark for expansion/application of that idea</p> <p>Deindustrialisation has occurred due to mechanisation and/or off-shoring (1) leading to job losses (1) and reduction in incomes (1) which reduces tax income for local authorities (1) and so local services suffer (1)</p> <p>Lack of government spending (austerity) (1) has reduced spending on services (1) including education/health services (1) leading to out-migration (1)</p> <p>Allow 3+1 but the points must be explanatory</p> <p>Accept any other appropriate response</p>	<p>(4)</p> <p>(1+1) + (1+1)</p> <p>or</p> <p>(1+1+1) + 1</p>

Question	Indicative content
7	<p style="text-align: center;">AO3 (4 marks) / AO4 (4 marks)</p> <p>AO3 (4 marks)</p> <ul style="list-style-type: none"> • Significant population differences between the regions – this is not ‘per capita’ data – this ‘explains most of the difference. • Wealth highly concentrated too which would explain some of the differences in domestic footprints • Wealthy regions with large amounts of commuting have high transport contribution • London’s high density and good public transport helps explain its lowish) transport footprint. • Industry/commerce unevenly distributed – much to do with location of power stations too • Long term decline might not continue given coal has virtually disappeared as fuel for use in electricity generation • Transport use not likely to decline but electric cars might make a difference in future (with legislation to support e.g. against air pollution). <p>AO4 (4 marks)</p> <ul style="list-style-type: none"> • South-east has largest footprint, especially transport • Industrial and commercial very uneven across the regions • North-east has high ind/comm but very low domestic and transport • York and Humber has highest ind/commerce; nearly double its domestic ‘footprint • Ind and comm highest on 9 of these regions • Transport highest in the other three; south-west and south-east and west Midlands • Some negatives/improvements i.e. creation of carbon sinks by land use changes (forestry). • Fall over time largely fuel changes in electricity generation • Not much further to go with these; see coal data • Transport dominant user of oil

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	<ul style="list-style-type: none"> 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. (AO4)
Level 2	4–6	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<p><i>No marks awarded</i></p> <ul style="list-style-type: none"> 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	<p><i>Threshold performance</i></p> <ul style="list-style-type: none"> 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	<p><i>Intermediate performance</i></p> <ul style="list-style-type: none"> 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	<p><i>High performance</i></p> <ul style="list-style-type: none"> 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.

Question number	Answer	Marks
8 (a)	<p>Award one mark for explaining the basic reason and second mark for a development of that. Expect;</p> <p>It is easy to access (1) so saving time and/or allowing more time for fieldwork (1)</p> <p>The beach is wide (1) so transect should show variation (1)</p> <p>It has some areas that are protected by groynes and others not (1) allowing a comparison to be made (1)</p> <p>Allow any other appropriate response</p>	(2)

Question number	Answer	Marks
8 (b)	<p>Award one mark for a reasonable suggestion and a further mark for supporting evidence for that idea.</p> <p>They appear to be evenly spaced so it is a systematic sample (1) allowing for proper comparison (1)</p> <p>The beach is roughly the same width at all three locations (1) allowing a fair comparison of gradient and sediment (1)</p> <p>There are groynes at two locations but not Profile 1 (1) which allows a comparison to be made (1)</p> <p>They are in different locations relative to the groynes (1) which allows a proper comparison to be made (1)</p> <p>Allow any other appropriate response</p>	(2)

Question number	Answer	Marks
8 (c)	<p>Award one mark for identifying a basic problem and a further mark for its extension.</p> <p>The profile starts under a cliff (1) so it might be a dangerous environment from rockfall (1)</p> <p>The presence of cliffs is likely to change the beach profile (1) without management being an issue (1)</p> <p>Allow any other appropriate response</p>	(2)

Question number	Answer	Marks
8 (d)	<p>Award one mark for identifying a basic reason and a further mark for its extension.</p> <p>Not all of it appears to be of great value (1) with agricultural land above the cliffs at the western end (1)</p> <p>The beach is quite wide (1) so maybe coastal erosion is quite limited (1)</p> <p>There is a wave cut platform below the cliff at the western end of the map (1) suggesting that cliff erosion is reducing as the cliff retreats (1)</p> <p>The beach faces south east (1) so fetch is going to be small so wave heights will be low(er) (1)</p> <p>Some parts of the beach are already protected by groynes (1) which may be enough to reduce the risk of erosion (1)</p> <p>Allow any other appropriate response</p>	<p>(4)</p> <p>(1+1) + (1+1)</p>

Question number	Answer	Marks
9 (a)	<p>Award one mark for explaining the basic reason and second mark for a development of that. Expect;</p> <p>It is easy to access (1) so saving time and/or allowing more time for fieldwork (1)</p> <p>The stream is accessed by a footpath (1) so no legal issues (1)</p> <p>The stream is quite narrow (1) allowing data to be gathered safely (1)</p> <p>Allow any other appropriate response</p>	(2)

Question number	Answer	Marks
9 (b)	<p>Award one mark for a reasonable suggestion and a further mark for supporting evidence for that idea.</p> <p>They appear to be evenly spaced so it is a systematic sample (1) allowing for proper comparison (1)</p> <p>There are tributaries (1) so there should be variations in the channel characteristics (1)</p> <p>They appears to be a floodplain at site 6 (1) which allows a proper assessment of flood risk (1)</p> <p>Allow any other appropriate response</p>	(2)

Question number	Answer	Marks
9 (c)	<p>Award one mark for identifying a basic weakness and a further mark for its extension.</p> <p>It is not on the main river measured (1) so cannot be relevant in downstream changes and flood risk (1)</p> <p>It doesn't appear to be on any river but in woodland (1) so not relevant to the study (1)</p> <p>It isn't on the footpath (1) so there are access issues (1)</p> <p>Allow any other appropriate response</p>	(2)

Question number	Answer	Marks
9 (d)	<p>Award one mark for identifying a basic reason and a further mark for its extension.</p> <p>Not all of it appears to be of great value (1) with agricultural land dominant (1)</p> <p>There are no settlements/houses in the valley itself (1) so flooding poses no risk to life/property (1)</p> <p>The river is flowing in a (relatively) deep valley (1) and/so the floodplain is very small (1)</p> <p>Flooding might be useful (1) bringing sediment onto the valley floor/floodplain (1)</p> <p>Allow any other appropriate response</p>	<p>(4)</p> <p>(1 + 1) + (1 + 1)</p>

Question number	Answer	Marks
10 (a)	<p>The candidates have a clear steer to the types of data collected – ‘.....they measured litter, traffic noise, graffiti, amount of open space and the quality of the buildings.’ They are not told how this data was selected or measured.</p> <p>They selected sites by sampling (allow any coherent explanation of sampling (1) and at each site selected they measured the amount of litter (allow any variable) on a scale of (allow any legitimate scale (1)</p> <p>They designed a questionnaire for the local inhabitants asking them to evaluate the quality of their environment perhaps using a Lickert scale (1) which would enable a comparison to be made of the two areas (1)</p> <p>Allow any other appropriate response</p>	(2)

Question Number	Indicative content
10 (b)	<p style="text-align: center;">AO3 (4 marks) / AO4 (4 marks)</p> <p>AO3</p> <ul style="list-style-type: none"> • Census data is old -2011 so may not be reliable • Evidence suggests that Area A is changing (graduates etc) – maybe both studentification and gentrification • Presence of university supports above idea(s) as does number of ‘professionals’ • Many inner cities have changed in recent years and 9/10 years since Census data released • We have no idea about the quality of the four-bed houses • Many inner city houses large terraced houses maybe subdivided • Conclusion is not reliable – ‘always’ an obvious problem • Causation not tested = better environment because.... • Plausible that better environments attract better off people • Only certain aspects of environment were measured by students in their primary data so limited scope and thus conclusion is highly partial <p>AO4</p> <ul style="list-style-type: none"> • Census data is mixed but Area A has much higher scores for owner-occupation and 4-bedroomed houses • Less of a difference in terms of professional jobs • Area A much younger but also better qualified academically • Area A has much more varied land-use • Area B above national averages in all categories • Area B appears to be commuter suburb • Primary data is divided into five categories and all score better in Area B

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	<ul style="list-style-type: none"> 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) Few aspects of the enquiry process are supported by the use of geographical skills to obtain information, which has limited relevance and accuracy. Communicates generic fieldwork findings and uses limited relevant geographical terminology. (AO4)
Level 2	4-6	<ul style="list-style-type: none"> 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) Some aspects of the enquiry process are supported by the use of geographical skills. Communicates fieldwork findings with some clarity using relevant geographical terminology occasionally. (AO4)
Level 3	7-8	<ul style="list-style-type: none"> 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) All aspects of the enquiry process are supported by the use of geographical skills. Communicates enquiry-specific fieldwork findings with clarity, and uses relevant geographical terminology consistently. (AO4)

Question number	Answer	Marks
11 (a)	<p>The candidates have a clear steer to the types of data collected – ‘.....they measured litter, traffic noise, graffiti, amount of open space and the quality of the buildings.’ They are not told how this data was selected or measured.</p> <p>They selected sites by sampling (allow any coherent explanation of sampling (1) and at each site selected they measured the amount of litter (allow any variable) on a scale of (allow any legitimate scale (1)</p> <p>They designed a questionnaire for the local inhabitants asking them to evaluate the quality of their environment perhaps using a Lickert scale (1) which would enable a comparison to be made of the two villages (1)</p> <p>Allow any other appropriate response</p>	(2)

Question Number	Indicative content
11 (b)	<p style="text-align: center;">AO3 (4 marks) / AO4 (4 marks)</p> <p>AO3</p> <ul style="list-style-type: none"> • Census data is old -2011 so may not be reliable • Evidence suggests that Village A is changing (graduates, elderly etc) – maybe both second home owners and retirement • Many coastal villages have changed in recent years and 9/10 years since Census data released • Presence of restaurants and bars relatively high number of ‘professionals’ • We have no idea about the quality of the four-bed houses • Many older village houses may be large terraced houses, maybe subdivided • Conclusion is not reliable – ‘always’ an obvious problem • Causation not tested = better environment because.... • Plausible that better environments attract better off people • Only certain aspects of environment were measured by students in their primary data so limited scope and thus conclusion is highly partial <p>AO4</p> <ul style="list-style-type: none"> • Census data is mixed but Village A has much higher scores for owner-occupation and 4-bedroomed houses • Less of a difference in terms of professional jobs • Village A much older but also better qualified academically • Village A has much more varied land-use • Village B above national averages in all categories • Village B appears to be commuter community • Contrasting services in the two locations – closure of pub and shop in Village B • Primary data is divided into five categories and all score better in Village B

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	<ul style="list-style-type: none"> 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) Few aspects of the enquiry process are supported by the use of geographical skills to obtain information, which has limited relevance and accuracy. Communicates generic fieldwork findings and uses limited relevant geographical terminology. (AO4)
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