

Mark Scheme January 2009

GCE

GCE Geography (6GE02)



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6GE02 Mark Scheme

Question Number		Question		
1(a)		Describe the characteristics and tracks of the two storms.		
QWC (i, ii	i, iii)			
Series		Indicative content		
		Ivan	Jeanne	
Characteristics Tracks		Few deaths despite high intensity Cat 5 storm. Much of the high intensity hurricane activity was over the sea. Predictably lost lots of its energy on landfall. 122 deaths Damage \$21 billion A more westerly track compared to Jeanne. Also looped the loop. Travelled over sea long time before striking landfall. May have made prediction easier.	Greatest number of deaths, although only tropical storm strength. Secondary problems of floods and landslides (caused by high rainfall) are indicated on the resource. Relatively slow. 3000 deaths \$7.6 billion damages An easterly track, doing an unusual loop-the-loop sequence. This may have may it harder to predict and evacuate. Shorter overall track than Ivan, but more power over land	
Level	Mark	Descriptor	more pewer ever land	
Level 1	1-4	Basic use of diagram only with one or two descriptive lift-offs only. Lacks structure and depth. Considerable errors in language.		
Level 2	5-7	Describes some of the characteristics and track for both storms / one storm in depth. May be unbalanced. Some structure, and some written language errors.		
Level 3	A clear response with effective use of resource and data. Describes characteristics and tracks for both storms. Structured and balanced response Written language errors are rare.		se.	

Question Number	Question
1(b)	Describe the fieldwork and research you would undertake in order to
QWC (i, ii, iii)	investigate changing weather conditions.
Series	Indicative content

- Observation of changing weather conditions can conducted over different time periods, e.g. few
 days to look at changes associated with a depression, or over 1 term / even a year. Expect
 students to discuss weather diaries which can take a mixture of forms, e.g. e-diary (on web),
 written notes, video / pictures.
- Expect many candidates to record changes in air masses, weather systems, anticyclones etc and link to synoptic conditions.
- Some candidates may also recognise that the most reliable records involve the use of a range of techniques and research opportunities. Data could also be pooled as a group.

Fieldwork (primary):	Use of various local weather instruments, e.g. anemometer, thermometer, whirling psychrometer, rain gauges etc. Also more qualitative observations, e.g. changes in cloud cover, what it 'feels' like, whether the heating is required, seeing starts at night.
Research (secondary):	Use of various sources to get a picture of weather - websites, newspapers, blogs / forums etc. The best responses will provide detailed evidence of specific sources, e.g. specialist weather websites etc, rather than 'the internet'.

Note: It is important to distinguish which fieldwork and research is relevant to weather and which is not (e.g. rivers / flooding, land use etc).

Always credit relevant descriptions of fieldwork (including virtual) from both UK and overseas locations.

Level	Mark	Descriptor
Level 1	1-4	Very limited range of fieldwork / research described. Fieldwork may be not appropriate to weather studies. Lacks structure. Considerable errors in language.
Level 2	5-8	Descriptive style but with some statements about either fieldwork or research approaches linked to weather. May be a description that lacks focus on the question / less relevant techniques. Likely to be unbalanced and lacking detail. Expect limited use of geographical terminology. There are some written language errors.
Level 3	9-12	Describes a range of fieldwork and/or research approaches linked to weather, but may lack balance. Some use of geographical terminology. Response shows some structure, limited written language errors. Max 10 if only fieldwork or research.
Level 4	13-15	Structured account which describes a balanced range of personal weather fieldwork and research techniques in detail; shows good use of own / group fieldwork, with good use of terminology. Written language errors are rare.

Question Number	Question
1(c)	For ONE extreme weather event describe the methods of management used
QWC (i, ii, iii)	and comment on their effectiveness.
Series	Indicative content

Candidates may choose from a range of extreme weather events - hurricanes, river floods, tornado, heatwave, or drought.

Detail of management strategies will depend on choice of event and location e.g. Levees / evacuation / preparedness linked to hurricane Katrina, land use zoning related to river flooding, warnings and shelter for tornadoes, emergency water management for droughts or longer term water management in preparation for drought.

- Some candiadtes may describe top-down vs bottom up or the role of community preparedness / participation and education.
- Some responses may consider factors, i.e. which are more important, rather than a decsription of different types of approach.
- Credit reference to own fieldwork and research.

Level	Mark	Descriptor
Level 1	1-4	Extreme weather event may not be identified. Basic, generalised points that lack focus on management; may focus on impacts of extreme weather event. Lacks structure; very limited use of geographical terminology. Considerable errors in language.
Level 2	5-7	Some management methods identified for an extreme weather event, with some description and occasional comment. Some structure. Likely to be unbalanced. Some written language errors.
Level 3	8-10	Detailed description of management methods linked to extreme weather event with some comments on their effectiveness. Well structured and balanced response. Written language errors are rare.

Question Number	Question
2(a) QWC (i, ii, iii)	Describe the physical and human features of the coast shown in the photograph.
Series	Indicative content

The photo reveals a range of features:

Physical	Human
 Spit / bar /tombolo Beaches / cliffs Natural habour / bay for shelter Sand dune ecosystems / saltmarsh Various sand banks / mud flats and shallow (safe) water. Woodland near coast and scrub in foreground, e.g. gorse etc. 	 Groynes on beaches (to build up sand and reduce impact of LSD) Port Settlement in distance /urban New shoreline homes / hotels built Road leading to ferry; ferries / boats Footpaths in dunes / coastal areas

Some candidates may attempt to recognise <u>scale</u> of different features, e.g. length of spit / tombolo; also identify the importance of deposition also this stretch of coast. Structure likely to be physical and human elements or geographical approach e.g. foreground/background/along shoreline, etc Remember that the question requires description, so **do not overly credit explanation**.

Level Mark Descriptor 1-4 Level 1 Lacks structure, limited range of features described; lacks accuracy and limited use of geographical terminology. Considerable errors in language. Level 2 5-7 Some range of features described with some accuracy, physical and/or human, but may be unbalanced. Some structure. Some written language errors. 8-10 A detailed, accurate description with effective use of resource across a range Level 3 of both physical and human features. Well structured good, use of correct terminology to identify features. Written language errors are rare.

Question Number	Question
2(b)	Describe the fieldwork and research you would undertake in order to
QWC (i, ii, iii)	investigate changes in coastal land use over time.
Series	Indicative content

There are a range of fieldwork opportunities - expect these to include:

Fieldwork (primary):	Create land use map and compare to historic plans; speaking to residents and visitors (questionnaires / structured interviews), oral histories, footfalls, parking etc. Use of video or transcripts to record ideas (could be group approach). Rates of erosion if linked to landuse change (could be secondary too).
Research (secondary):	Historic maps to illustrate change, e.g. www.old-maps.co.uk ; also local newspapers, blogs / forums etc. Old photographs and post cards may be a useful source (again could be internet sourced). Possible use of GIS / electronic maps / satellite images to illustrate change. The best responses will provide detailed evidence of specific sources, e.g. specialist local historical websites etc, rather than 'the internet'.

- Provide credit for possible reference to sampling strategies, e.g. systematic and stratified, no of people etc; also some candidates may have used a pilot survey, e.g. to format questionnaires.
- Also credit more detailed description of land use map categories and justification for this.
- Allow liberal interpretation of 'over time', i.e. 150 years to 5 years (e.g. for a recent regeneration strategy at coastal town).

Important to distinguish which fieldwork and research is relevant to coastal land use and which is not (e.g. beach processes, sand dune surveys, costal defences etc)

Always credit relevant descriptions of fieldwork (including virtual) from both UK and overseas locations.

Level	Mark	Descriptor
Level 1	1-4	Very limited range of fieldwork / research described. Fieldwork may be not appropriate to coastal landuse. Lacks structure. Considerable errors in language.
Level 2	5-8	Descriptive style but with some statements about either fieldwork or research approaches linked to coastal landuse. May be a description that lacks focus on the question / less relevant techniques. Likely to be unbalanced and lacking detail. Expect limited use of geographical terminology. There are some written language errors.
Level 3	9-12	Describes a range of fieldwork and/or research approaches linked to coastal landuse, but may lack balance. Some use of geographical terminology. Response shows some structure, limited written language errors. Max 10 if only fieldwork or research.
Level 4	13-15	Structured account which describes a balanced range of coastal landuse fieldwork and research techniques in detail; appreciates the time dimension, shows good use of own / group fieldwork, with good use of terminology. Written language errors are rare.

Question Number	Question
2(c)	Using examples, explain why the methods of coastal management vary from
QWC (i, ii, iii)	place to place.
Series	Indicative content

Four coastal management options are available to decision makers:

Do nothing, Retreat, Hold the line, Advance the line.

Decisions are largely based on: land use cost-benefit (land use may be integral to this), environmental impact assessment (EIA), feasibility studies and risk assessment.

- In general places with high land values would expect to be protected, often by hard defences. This is largely due to presence of economic development and/or dense population.
- In contrast, little protection is offered in places where farmland, few resources, sparse population and limited finance are found.
- 'Value' may alternatively be environmental, eg ecosystems, heritage, etc and here softer/sustainable methods might be appropriate.
- Other natural factors such as geology, relief, coastal processes, etc may be relevant in decisions.

Expect some reference to SMP's and ICZM; role of Environment Agency or local authority partnerships.

Best responses will tend to describe defence methods with little exemplification while the best will provide explanation and fuller exemplification

Credit reference to own fieldwork / case studies which have linkage.

- NB Examples could be location or types of coastal management
- Max 7 for a response with only 1 type in 1 location.

Level	Mark	Descriptor
Level 1	1-4	Describes some management options / defences. Lacks structure and very limited use of geographical terminology. Limited or no reference to an examples. Considerable errors in language.
Level 2	5-7	Some methods identified to support ideas about management options, with some explanation. Some structure. Likely to be unbalanced. There are some written language errors.
Level 3	8-10	A clear, exemplified, explanation of why coastal management methods vary 'from place to place'. Well structured and balanced response which uses examples effectively. Written language errors are rare.

Question Number	Question
3(a)	Describe the fieldwork and research you would undertake in order to
QWC (i, ii, iii)	investigate economic and social inequality in an urban area.
Series	Indicative content

There are a wide range of fieldwork and research activities linked to both economic and social inequality.

Primary data	Range of environmental quality surveys (e.g. landscape, street quality etc). These are surrogate indicators for both economic and social inequality. Questionnaires, oral histories, extended interviews etc may also be relevant. Opportunity for mobility / accessibility maps, clone town surveys; graffiti assessment, litter etc. Transport data (could also be secondary)
Secondary research:	Use the internet to research 'geo-demographic' data (e.g. Acorn and Cameo profiles), socio-economic profiles from census (National Statistics). Also geo-located pictures to help with inequality e.g. Flickr, Panoramio, Geograph etc. May also use VOA website to further pursue shopping inequality etc.

Provide credit for possible reference to sampling strategies, e.g. systematic and stratified, no of people etc; also some candidates may have used a pilot survey, e.g. to format questionnaires. Credit good distinction between economic and social inequality, although there is overalp between technques. Ecocomic more likley to be focused on research rather than field-based techniques.

- Also credit candidates who indicate that quality surveys have been pre-calibrated or customised to improve their reliability.
- Always credit relevant descriptions of fieldwork (including virtual) from both UK and overseas locations.
- If rubric, credit generally applicable concepts and techniques up to Max 6.
- Reward candidates who link to a specfic location where they have collected information.

Level	Mark	Descriptor
Level 1	1-4	Very limited range of fieldwork / research described. Fieldwork may be not appropriate to investigating inequality. Lacks structure. Considerable errors in language.
Level 2	5-8	Descriptive style but with some statements about either fieldwork or research approaches linked to inequality a description that lacks focus on the question / less relevant techniques. Likely to be unbalanced and lacking detail. Expect limited use of geographical terminology. There are some written language errors.
Level 3	9-12	Describes a range of fieldwork and/or research approaches linked to inequality, but may lack balance. Some use of geographical terminology. Response shows some structure, limited written language errors. Max 10 if only fieldwork or research.
Level 4	13-15	Structured account which describes a balanced range of fieldwork and research techniques to measure inequality in detail; appreciates the economic and social dimension, shows good use of own / group fieldwork, with good use of terminology. Written language errors are rare.

Question Number	Question
3(b)	Study Figure 3 which shows part of a student's investigation of deprivation
QWC (i, ii, iii)	and environmental quality in a city.
	Comment on the limitations of the data collection and presentation
	techniques.
Series	Indicative content

Data collection limitations:

- Interupted transect every 50m may mean data was missed
- Criteria for deprivation ommitted education and housing which is very important social data
- No pre-calibration of EQ scoring system
- Data only collectd in am
- Rain may have affected quality scores (influencing judgements)
- Transect misses data on either side of road

Data presentation limitations:

- Generally graph is confusing / low usability
- Difficulty of interpreation of deprivation index and quality graphs
- No units on X axis to indicate distance (although included in title)
- Line graph may be technically incorrect to display quality data (not-continuous)
- Scales confusing on graph index of deprivation 6 good or bad?
- Location of transect in relation to city not indicated on any type of map

Accept any reasonable ideas.

Credit reference to ways the data collection / presentation could be improved.

Level	Mark	Descriptor
Level 1	1-4	One or two superficial criticisms/ limitations of the 'it was raining' variety. Lacks structure and very limited use of geographical terminology. Expect considerable errors in language.
Level 2	5-7	Some comment on either data collection / presentation, unbalanced and lacking detail. Shows some structure. There are some written language errors.
Level 3	8-10	A clear response with valid comments on collection and presentation. Structured, good use of geographical terminology. Written language errors are rare.

Question Number	Question
3(c)	For one named rural or urban area, explain why it is difficult to reduce
QWC (i, ii, iii)	deprivation
Series	Indicative content

Deprivation is a lack of access to services / amenities / opportunities considered the norm in a society. The very nature and causes of deprivation are an explanation for why the problem is difficult to solve.

There are a number of potential difficulties:

Rural	Urban	
 Loss of traditional employment sources, e.g. farming / fishing Deprivation may be 'hidden' in rural areas (e.g. no graffiti, litter etc). Lack of rural employment opportunity, e.g. limited new business start-up grants. New technologies may not be available / realistic to some remote communities. Rural people may have less 'voice' / political sway or interest. Inaccessibility / isolation 	 May be a culture of deprivation which is difficult to overcome. Historic cycle of poverty / deprivation, e.g. caused by deindustrialisation - unemployment etc. Uneven distribution of resources and power. Social barriers, e.g. age, income, disability, religion, culture etc. 	

May also be some generic limitations, e.g. lack of community enthusiasm / push, lack of local or central government funding priority, lack of technology etc. May also be physical factors, e.g., rivers, roads, relief etc. Accept any reasonable ideas.

- Can be LEDC / overseas, but expect more UK example(s).
- If urban and rural are both tackled, mark both and credit the best.

Level	Mark	Descriptor
Level 1	1-4	Identifies one or two difficulties only; no / limited reference to location. May alternatively describe what deprivation is. Little structure and very limited use of geographical terminology. Considerable errors in language.
Level 2	5-7	Identifies some difficulties with some explanations linked to the nature of deprivation; reference to a named location. Some structure. There are some written language errors.
Level 3	8-10	A structured account which considers difficulties for a location, with some supporting detail and explanations. Well structured and balanced response. Written language errors are rare.

Question Number	Question
4(a)	Describe the fieldwork and research you would undertake in order to
QWC (i, ii, iii)	investigate why some urban areas are in need of rebranding.
Series	Indicative content

Urban can include town / city OR coastal, former coal mining area etc. Give urban a wide interpretation.

There are a wide range of fieldlwork and research activities -

Primary data	Field notes, field sketches, photographs, extended interviews, focus groups, customised 'placecheck form'. Also questionnaires, retail / shopping quality, footfall / pedestrian count and other personalised environmental quality assessments, litter survey, graffiti assessment etc
Secondary research:	Use the internet to research 'geo-demographic' data (e.g. Acorn and Cameo profiles), socio-economic profiles from census (National Statistics). Also geo-located pictures to help with place identity e.g. Flickr, Panoramio, Geograph etc. May also use VOA website to further pursue shopping quality etc.

Provide credit for possible reference to sampling strategies, e.g. systematic and stratified, no. of people etc; also some candidates may have used a pilot survey, e.g. to format questionnaires. Credit good distinction between fieldwork and research, although there is likely overalp between approaches.

- Also credit candidates who indicate that quality surveys have been pre-calibrated or customised to improve their reliability.
- Always credit relevant descriptions of fieldwork (including virtual) from both UK and overseas locations.

• If rubric, credit generally applicable concepts and techniques up to Max 6.

Level	Mark	Descriptor
Level 1	1-4	Very limited range of fieldwork / research described. Fieldwork may be not appropriate to investigating the need to rebrand. Lacks structure. Considerable errors in language.
Level 2	5-8	Descriptive style but with some statements about either fieldwork or research approaches linked to the need to rebrand; lacks focus on the question / less relevant techniques. Likely to be unbalanced and lacking detail. Expect limited use of geographical terminology. There are some written language errors.
Level 3	9-12	Describes a range of fieldwork and/or research approaches linked to the need to rebrand, but may lack balance. Some use of geographical terminology. Response shows some structure, limited written language errors. Max 10 if only fieldwork or research.
Level 4	13-15	Structured account which describes a balanced range of fieldwork and research techniques to determine the need to rebrand in detail, shows good use of own / group fieldwork, with good use of terminology. Written language errors are rare.

Question Number	Question
4(b) QWC (i, ii, iii)	Study Figure 4 which shows some of the results from a students' investigation of a coastal town in south-west England. Comment on the limitations of the data collection and presentation techniques.
Series	Indicative content

Data collection limitations:

- Central postcode not identified
- Postcode checkers are very generalised having large spatial area. Reliability issues.
- Postcode checkers only reveal certain types of data about people can be missleading.
- Limited range of websites used to collect research information. No use of census / local authority data etc which may be more reliable / detailed
- Blogs attract people who ,like to have a rant' therefore likely biased.
- Photos are inherently biased can easily show good or bad, depending on photographer

Data presentation limitations:

- Photographs not located onto any type of base map
- Photos could be eaily annotated to improve visual appeal
- No graphing up of any information, e.g. *upmystreet* data which could easily be done
- Annotation / interpretaion / highlighhting of blogs data would mek it more meaningful

Accept any reasonable ideas.

Level	Mark	Descriptor
Level 1	1-4	One or two superficial criticisms/ limitations e.g. photos too small / not labelled. Lacks structure and very limited use of geographical terminology. Expect considerable errors in language.
Level 2	5-7	Some comment on either data collection / presentation, unbalanced and lacking detail. Shows some structure. There are some written language errors.
Level 3	8-10	A clear response with valid comments on collection and presentation. Structured, good use of geographical terminology. Written language errors are rare.

Question Number	Question
4(c)	With reference to examples, examine the role of different 'players' involved
QWC (i, ii, iii)	in the rebranding process.
Series	Indicative content

Players are really stakeholders, i.e. are individuals, groups or organisations who have an interest in the development or outcomes of a particular project. They are interested parties as they may be involved financially or emotionally as the development is within a neighbourhood close to where they live.

Depending on projects / examples chosen there could be a number of stakeholders - 'bigger players' examples can include:

Urban	Rural
The Arts Council offers various	European Union , e.g. Objective 1
funding opportunities for arts linked	programme and LEADER programme
projects.	
English Partnerships - principle aim	Action with Communities in Rural
is to 'deliver high quality sustainable	England, or ACRE promotes local
growth in England'.	rural initiatives
Advantage West Midlands -	Natural England - grants to farmers
Development Agency	for various agri-environmental
	schemes.

Also Regional Development Agencies (can be both urban and rural); heritage Lottery Fund (HLF), Big Lottery Fund.

Could also be local small-scale / bottom-up / community groups acting as stakeholders. Huge range of possibilities here.

May also have mention of the important of 'partnership' working.

Examples can be places, players or strategies.

Level	Mark	Descriptor	
Level 1	1-4	Identifies one or two players only, with a few generalised ideas. Little structure and very limited use of geographical terminology. Considerable errors in language.	
Level 2	5-7	Identifies some players with some details and support. Some structure. Likely to be unbalanced. There are some written language errors.	
Level 3	8-10	A structured account which examines the role of different players with sound supporting detail: balanced response. Written language errors are rare.	