Mark Scheme (Results) January 2011

GCE

GCE Geography (6GE02) Paper 1

Edexcel is one of the leading examining and awarding bodies in the UK and throughout the world. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers.

Through a network of UK and overseas offices, Edexcel's centres receive the support they need to help them deliver their education and training programmes to learners.

For further information, please call our GCE line on 0844 576 0025, our GCSE team on 0844 576 0027, or visit our website at www.edexcel.com.

If you have any subject specific questions about the content of this Mark Scheme that require the help of a subject specialist, you may find our Ask The Expert email service helpful.

Ask The Expert can be accessed online at the following link:

http://www.edexcel.com/Aboutus/contact-us/

Alternatively, you can speak directly to a subject specialist at Edexcel on our dedicated Geography telephone line: 0844 372 2185

January 2011
Publications Code US026348

All the material in this publication is copyright © Edexcel Ltd 2011

General Guidance on Marking

All candidates must receive the same treatment.

Examiners should look for qualities to reward rather than faults to penalise. This does NOT mean giving credit for incorrect or inadequate answers, but it does mean allowing candidates to be rewarded for answers showing correct application of principles and knowledge.

Examiners should therefore read carefully and consider every response: even if it is not what is expected it may be worthy of credit.

Candidates must make their meaning clear to the examiner to gain the mark. Make sure that the answer makes sense. Do not give credit for correct words/phrases which are put together in a meaningless manner. Answers must be in the correct context.

Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the Team Leader must be consulted.

Using the mark scheme

The mark scheme gives:

- an idea of the types of response expected
- how individual marks are to be awarded
- the total mark for each question
- examples of responses that should NOT receive credit.
- 1 / means that the responses are alternatives and either answer should receive full credit.
- 2 () means that a phrase/word is not essential for the award of the mark, but helps the examiner to get the sense of the expected answer.
- 3 [] words inside square brackets are instructions or guidance for examiners.
- 4 Phrases/words in **bold** indicate that the <u>meaning</u> of the phrase or the actual word is **essential** to the answer.
- ecf/TE/cq (error carried forward) means that a wrong answer given in an earlier part of a question is used correctly in answer to a later part of the same question.

Quality of Written Communication

Questions which involve the writing of continuous prose will expect candidates to:

- Show clarity of expression
- Construct and present coherent arguments
- Demonstrate an effective use of grammar, punctuation and spelling.

Full marks will be awarded if the candidate has demonstrated the above abilities.

Questions where QWC is likely to be particularly important are indicated "QWC" in the mark scheme BUT this does not preclude others.

Additional Comments specific to 6GE02

- Always credit bullet points and similar lists, but remember if the list is the only response, then this is
 unlikely to be able to get into the top-band (L3 or L4) based on QWC shortcomings. However,
 bullets and lists as part of a response should permit access to the top band.
- Credit reference to the full investigative fieldwork and research process when referred to in any sections of the paper.
- Remember to use the full range of marks for all questions.
- Credit reference to GIS as a fieldwork and research tool in all questions.
- Credit reference to candidates own fieldwork and research across ALL questions.
- Credit use of case studies and exemplar material where relevant.

Question	Number	Question		
1(a) QWC (i, ii	i, iii)			
Series		Indicative content		
		There may be a number of factors causing change from year to year: E.g. El Nino, La Nina Changes in land use ie. Urbanisation, deforestation Shifting jet-stream/polar front Natural variations in frequency of events Pressure systems Global warming/climate change Also credit candidates who comment on variability, reliability or subjectivity of data and patterns in data, e.g. Increasing incidence. Credit sensible use of examples. Note: Question requires two events to be discussed		
Level	Mark	Descriptor		
Level 1	1-4	Basic response using one or two lift-offs only. No real understanding of information in table, likely to be limited to one reason. Considerable errors in language.		
Level 2	5-7	May use data in table to develop own ideas/reasons. Uses at least one column. Some structure and some written language errors. Some use of terminology.		
Level 3 A clear response with use of data in table, with a range/detail of ideas/ reasons. Comments on 2 events / columns of data, and over time. Well structured response. Written language errors are rare.		reasons. Comments on 2 events / columns of data, and over time. Well		

Questic Numbe		Question			
1(b) QWC (i					
Series		Indicative content			
		Remember to credit development (causes and processes) rather than impacts.			
		In the context of river flooding , credit development of flood linked to precipitation hydrology, land-use etc, not the subsequent impacts (i.e. a case study approach). Extreme weather events could include hurricanes, extra tropical and temperate sto snow and ice and droughts. Extreme can be interpreted as a freak, severe or unusui.e. bucking the normal trend.			
		Event	Development conditions / factors		
		Tropical Storm (Hurricane)	Warm (tropical) seas >26.5C, rising moist air from the sea, influence of ITCZ etc. Upper winds mustn't be too strong. Grow from low pressure centres. Coriolis force.		
		Storms	Deep depression - associated cold fronts etc. Get energy from horizontal temp gradients in atmosphere; develop under jet streams along polar front. Junction of cold and warmer air.		
		Snow and ice Cold, precipitation, antecedent conditions. Associated with lo pressure. Temperature and moisture gradients must be just rig to produce snow. Also allow ideas about development of sleet freezing rain, hail etc.			
 Meteorological: prolonged period with less than a precipitation Agricultural: insufficient moisture for crop product be influenced by poor land / soil management) Hydrological: water reserves in aquifers, lakes, reseated below average. Causes: lack of precipitation caused by changes in tracelatitude depressions, El Nino and impact on atmosphere 		 precipitation Agricultural: insufficient moisture for crop production (may be influenced by poor land / soil management) Hydrological: water reserves in aquifers, lakes, reservoirs etc 			
		Also accept other extreme weather events e.g. tornadoes. El Nino/La Nina should be treated as causes of an extreme weather event, rather than an extreme weather event on its own.			
Level	Mark	Candidates should only choose one type of event, but credit multiple examples of the same event in different locations and / or at different times. Descriptor			
Level 1	1-4	Basic and generalised May focus on impacts	with one or two ideas only relating to chosen extreme weather. rather than development. Lacks structure and very limited use of ogy. Considerable errors in language.		
Level 2	5-7	Some ideas examined, but likely in be restricted either in range and or depth. Some links to how it develops is present but is not comprehensive. Some structure and some written language errors.			

Level	8-10	A response where some range of factors are discussed providing or depth and / or detail.			
3		Development is clearly incorporated. Well structured and balanced response. Written			
		language errors are rare.			

Questio		Question				
Numbe 1(c)						
QWC (i	i, ii,					
Series		Indicative content				
		Candidates can choose a range of extreme weather events including: river flooding, hurricanes, tornadoes, heat wave and drought. Expect floods since it is more realistic to do fieldwork on, although some candidates may have done others so credit. The specification indicates the range of impacts may be social, environmental or economic. In the context of fieldwork and research it may be difficult to investigate all of these in any depth, although large events may have measurable / reported economic impact. Other impacts on health, infrastructure etc could also be suggested. Evidence of research into these should be well credited.				
			and research chosen will vary according to the event, so the should just be taken as a guide. Fieldwork approaches can be linked to d there is overlap.			
		Fieldwork (primary): Evidence can come from qualitative sources, e.g. historic / eye witness accounts. Use of interviews / focus groups. Evidence of levels may be anecdotal, e.g. previous signs of damage. Risk maps. May also be based on some quantification e.g. bankfull levels etc; use of hardware models, e.g. storm simulation. Also credit work which looks at perception of risk / impact, e.g. via interviews. Questionnaires may also feature. Also use of weather diaries/local monitoring of weather. Research (secondary): Use of various sources to get a picture of impacts of extreme event e.g. GIS Environment Agency maps; flood risk maps for insurance companies, historic newspaper cuttings / reports and other documentary evidence e.g. newscasts etc The best responses will provide detailed evidence of specific sources, e.g. specialist weather websites etc, National Rivers				
			Flow Archive (NRFA), NOAA, MET Office rather than 'the internet'.			
Level	Mark	Descriptor				
Level 1	1-4	Very limited range of fieldwork / research described. Fieldwork may not be appropriate / linked to a weather / flood event. Lacks structure. Considerable errors in language.				
Level 2	5-8	Descriptive style but with some statements about either fieldwork or research approaches linked to a weather / flood event. Impacts may be implied. 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 a weather / flood event impacts, 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 / flood fieldwork and research techniques in detail linked to impacts; shows good use of own / group fieldwork, with good use of terminology. Written language errors are rare.				

Question Number		Question		
2(a)				
QWC (i, i	1, 111)	In Protein and the		
Series		Indicative content		
 along this stretch of the coast: Retreat of the coast from the original 2000 year ag indicated on the map. Degree of loss looks like an from the scale. Loss of villages between Bridlington and Sunthorpe Geology is a controlling factor, looks like most rapi boulder clay compared to chalk (headland). These are evidence of coastal erosion. An alternative route through the question will be to draw evidence for coastal erosion. These may include document old maps and photographs, historic documents, oral histor fieldwork and research. Candidates may also mention the importance of LSD on the evidenced from the build-up of material near Sunthorpe at Humber Estuary (this is therefore an area of the coast which 		 Retreat of the coast from the original 2000 year ago dotted line indicated on the map. Degree of loss looks like an average of 3-5km from the scale. Loss of villages between Bridlington and Sunthorpe (>30 lost). Geology is a controlling factor, looks like most rapid with softer boulder clay compared to chalk (headland). These are evidence of coastal erosion. An alternative route through the question will be to draw on other sources of evidence for coastal erosion. These may include documentary sources such as old maps and photographs, historic documents, oral histories etc Credit own 		
Level	Mark	Descriptor		
Level 1	1-4	Basic response only with very limited range / depth of detail. Restricted to simple lift-offs from the map resource or very limited other evidence. Considerable errors in language.		
Level 2	5-7	Uses resource as a stimulus to develop own ideas, possibly including other evidence. May also focus on factors affecting coastal erosion. Expect some written language errors, but generally satisfactory structure.		
Level 3	8-10	A clear response with effective use of map linked to question. Some detail in either depth or range; focuses on evidence. Tries to deal with rapid for top of band. Well structured good use of correct terminology. Written language errors are rare.		

Question I	Number	Question
2(b)		
QWC (i, ii, iii)		
Series		Indicative content
		Hard defences: breakwaters, gabions, embankments, rip-rap, sea walls, cliff re-grading etc) to soft engineering and management: beach nourishment, beach profiling, dune stabilisation / regeneration, offshore reefs etc. These are more sustainable approaches.
		Hard engineering is often designed to protect high value coastal locations, e.g. towns and energy installations, but suffer from problems of high expense, loss of amenity, and problems of failure especially with sea levels rise.
		Sustainable coastal defence / management attempts to accommodate copy or work alongside natural systems and processes, with ecosystems often playing a key role. Typically such approaches are small scale, localised and bottom-up or community driven. They have the advantages of being environmentally friendly, sometimes cheaper and longer-lasting. Managed retreat is where the sea is allowed to flood parts of the intertidal zone - thus creating mudflats and valuable salt marsh habitat. Coastal realignment may be more controversial since it involves 'retreating the line', e.g. Kent, N. Norfolk and Essex. Many examples overseas where credit should be given.
		There may be reference to integrated coastal management, which sustainable / soft options vs hard defences may be discussed. Large coastal cells are broken down into smaller units and then action is taken via SMP (Shoreline Management Plans). NB. Accept a broad interpretation of "success" to include engineering
Lovel	Mark	success as well as broader environmental or socio-economic/CBA.
Level	Mark	Descriptor Pagin and generalized with few ideas on general management. Looks atwesting
Level 1 1-4		Basic and generalised with few ideas on coastal management. Lacks structure and very limited use of geographical terminology. Very limited or no reference to an example. Considerable errors in language.
Level 2	5-7	Is exemplified to support response. Some structure. Likely to be lacking in depth, but shows / implies some understanding of range of ideas. There are some written language errors. May mention success on occasion.
with idea of success. Well stru		A clear response which shows understanding of different approaches. Deals with idea of success. Well structured and balanced response which uses named location effectively and in depth. Written language errors are rare.

Question Number		Question		
2(c) QWC (i, ii, iii)				
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).	
		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 to illustrate change, e.g. 'Wheresthepath' 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).		
		•	hich shows innovation.	
Level	Mark	Descriptor	of Calibratic Assessment described. Each words assessment to	
Level 1	1-4	Very limited range of fieldwork / research described. Fieldwork may not be appropriate / linked to land use and / or time. Lacks structure. Considerable errors in language.		
Level 2	5-8	Some statements about either fieldwork or research approaches linked to change. 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	Describes a range of fieldwork and/or research approaches linked to coastal land use / development, but may lack depth and detail. Some use of geographical terminology. Response shows some structure, limited written language errors. Max 10 if only fieldwork or research.		ment, but may lack depth and detail. Some use of inology. Response shows some structure, limited written	
Level 4	13-15	Structured account which describes a balanced range of ideas and approaches linked to development and idea of 'time' 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		
3(a) QWC (i, ii	i, iii)			
Series		Indicative content		
		 The bipolar / generic quality sheet could be improved (I) + extended (E) in a number of ways: Use of adjectival descriptors for each evaluation, e.g. +1 - (-)1 (I) Larger range of bi-polar scores (E) Addition of centre '0' (E/I) Quantitative amounts, e.g. for litter (I) Greater range of categories; more focused on inequality (too general present) (E) Some of the descriptors are not clear or polar opposites, so some ambiguity should be removed (I) Using photos to accompany the sheet (I) Give credit for any other reasonable ideas as there will be an alternative approach. Candidates may: i) Examine the wider concept of inequality and suggest extensions to Figure 3 ii) Comment on the scoring categories and language on Figure 3 (or a combination of both). 		
Level	Mark	Descriptor		
Level 1	1-4	One or two basic items of data described from the resource, but not real improvements / extensions; limited to simple lift-offs. Lacks structure and considerable errors in language.		
Level 2	5-7	A range of descriptive comments linked to resource including one or two ideas regarding possible improvements and / or extensions. Some structure; there are some written language errors.		
Level 3	8-10	A clear response with good use of resource to suggest both valid improvements + extensions to the environmental quality sheet. Well structured and expect use of specific use of data. Ideas are sensible. Written language errors are rare.		

Question	Number	Question		
3(b) QWC (i, ii	i, iii)			
Series		Indicative content		
		Inequality and problems in urban areas may manifest themselves in a number of forms:		
		ca sa B	Ineven distribution of wealth in a society. Things money an buy: housing, basic services such as electricity, anitation, healthcare, education, career prospects etc us / train / rail / port infrastructure proximity and requency.	
		h	ack of access to opportunities such as affordable ousing, good schools, jobs, health. Employment and tatus important here.	
		u	nequality built into social and political structures, e.g. nfair legislation.	
		re e	ccess to computers (affordability?) , mobile phone eception, wi-fi, high speed broadband, mobile broadband tc	
		Many other types - provide credit. In LEDCs and MEDCs urban inequality may be driven by physical barriers (e.g. mountains / hills), remoteness or the economics of delivery of a particular service. Other factors will also be at play.		
Level	Mark	Note must be named	urban area.	
Level 1	1-4	Descriptor Basic and generalised with few ideas on urban inequality. Lacks structure and very limited use of geographical terminology. Very limited or no reference to a named urban example. Considerable errors in language.		
Level 2	5-7	Uses an urban example to support response. Some structure. Likely to be lacking in either range or depth, but shows / implies some understanding of problems of urban poverty/inequality. There are some written language errors.		
Level 3	8-10	A clear response which shows understanding of urban inequality. Well structured response which uses the example effectively to illustrate the problems. Written language errors are rare.		

Question	Number	Question		
3(c) QWC (i, i	i, iii)			
Series	_	Indicative content		
		There are a range of possibilities here - they may include:		
		Results & Expect references to specific places and data e.g. improvements seen through a range of surveys, the results from a questionnaire/interviews. Patterns of economic and environmental change e.g. land-use, job creation, improvements in infrastructure, education. Conclusions could involve summaries as well as discussions of		
		patterns and trends.		
		May include evaluation + comments on reliability		
		Credit presentation if it can form part of the results, e.g. scatter graphs etc. Expect a wide variety of ideas discussed, but limit credit to results and conclusions and not how it was done.		
Level	Mark	Descriptor		
Level 1	1-4	Very limited / no results or conclusions described. Outcomes may not be appropriate / linked to inequality. Maybe just a description of the fieldwork / research. Lacks structure. Considerable errors in language.		
Level 2	5-8	Descriptive style but with one or two statements about results and/or conclusions. May be mostly a description of the fieldwork approach. Expect limited use of geographical terminology. There are some written language errors.		
Level 3	9-12	Describes some results and/or conclusions partly linked to inequality within a named place. May describe schemes and strategies, including some limited evaluation. Some use of geographical terminology. Response shows some structure, limited written language errors.		
Level 4	13-15	Structured account which describes a range of results and conclusions; shows good use of own / group fieldwork, with good use of terminology and linked to inequality. Clear linkage to idea of 'schemes' and success. Evaluative in some instances. Written language errors are rare.		

Question Number		Question		
4(a) QWC (i, i	i, iii)			
Series		Indicative content		
		Photos may show a variety of evidence: 4a Belfast B&W photo, showing people in old dress etc. 20C industrial scene, workers (manual / skilled) cranes etc feature in the landscape. Large Titanic gantry can be seen in the distance.		
		4b Belfast Tour bus prominent to 'see the new sights'. Links to historic past and association of ship building. New architect-deigned building (CITI group) in the background - change of use + links to finance (typical of rebranding).		
		 Therefore evidence of rebranding might come in the form of: Change of land-use (industry to commerce + tourism) New buildings / conversion of industrial warehousing Change of 'image' Use of history / heritage tourism (link with popular Titanic story) to attract visitors Some may argue that the images alone may not be sufficient evidence of Belfast experiencing rebranding - need additional evidence. Credit any reference to own fieldwork or case study material which supports response. 		
Level	Mark	Descriptor		
Level 1	1-4	One or two basic lift-offs described only. Lacks structure and very limited use of geographical terminology. Considerable errors in language.		
Level 2	5-7	Some range of ideas linked to Q, but may lack either breadth or depth. May use one image more than the other. Some structure and use of terminology. There are some written language errors.		
Level 3	8-10	A clear response with good use of number of evidence from both images to support ideas / comments. Well structured good use of geographical terminology. May try to consider 'evidence'. Written language errors are rare.		

Question	Number	Question		
4(b) QWC (i, ii, iii)				
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. Their role is as 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 funding opportunities for arts linked projects.	European Union , e.g. Objective 1 programme and LEADER programme	
		English Partnerships - principle aim is to 'deliver high quality sustainable growth in England'. Action with Communities in Rural England, or ACRE promotes local rural initiatives		
		Advantage West Midlands - Development Agency	Natural England - grants to farmers 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, including more unusual overseas agencies and organisations. May also have mention of the important of 'partnership' working.		
Level	Mark	Descriptor		
Level 1 1-4		Identifies one or two players only. No reference to any examples. Little structure and very limited use of geographical terminology. Considerable errors in language.		
Level 2 5-7 Identifies some players in using either reasonable range / detail. Us one example to support response. Some structure. Likely to be un There are some written language errors.			e structure. Likely to be unbalanced.	
Level 3	8-10	A structured account which considers role of players using good range / detail. Well structured and balanced response which uses example(s) effectively (at least one in depth). Written language errors are rare.		

Question Number		Question	
4(c) QWC (i, ii, iii)			
Series		Indicative content	
		There are a range of possibilities here - they may include:	
		Results & Expect references to specific places and data e.g. improvements seen through a range of surveys, the results from a questionnaire/interviews. Patterns of economic and environmental change e.g. land-use, job creation, improvements in infrastructure, education.	
		Conclusions could involve summaries as well as discussions of patterns and trends.	
		May include evaluation + comments on reliability	
		Credit presentation if it can form part of the results, e.g. scatter graphs etc.	
		Expect a wide variety of ideas discussed, but limit credit to results and conclusions and not how it was done.	
Level	Mark	Descriptor	
Level 1	1-4	Very limited / no results or conclusions described. Outcomes may not be appropriate / linked to rebranding. Maybe just a description of the fieldwork / research. Lacks structure. Considerable errors in language.	
Level 2	5-8	Descriptive style but with one or two statements about results and/or conclusion. May be mostly a description of the fieldwork approach. Expect limited use of geographical terminology. There are some written language errors.	
Level 3	9-12	Describes some results and/or conclusions linked to rebranding within a named place. May describe schemes and strategies, including some limited evaluation. Some use of geographical terminology. Response shows some structure, limited written language errors.	
Level 4	13-15	Structured account which describes a range of results and conclusions; shows good use of own / group fieldwork, with good use of terminology. Clear linkage to idea of schemes and success of rebranding. Evaluative in some instances. Written language errors are rare.	

Further copies of this publication are available from Edexcel Publications, Adamsway, Mansfield, Notts, NG18 4FN

Telephone 01623 467467 Fax 01623 450481 Email <u>publications@linneydirect.com</u> Publications code US026348 January 2011

For more information on Edexcel qualifications, please visit www.edexcel.com/quals

Edexcel Limited. Registered in England and Wales no.4496750 Registered Office: One90 High Holborn, London, WC1V 7BH