

Mark Scheme (Standardisation)

January 2013

GCE Geography (6GE02/01)
Unit 2: Geographical Investigations

Edexcel and BTEC Qualifications

Edexcel and BTEC qualifications come from Pearson, the world's leading learning company. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information, please visit our website at www.edexcel.com.

Our website subject pages hold useful resources, support material and live feeds from our subject advisors giving you access to a portal of information. If you have any subject specific questions about this specification that require the help of a subject specialist, you may find our Ask The Expert email service helpful.

www.edexcel.com/contactus

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:

www.pearson.com/uk

Summer 2012

Publications Code xxxxxxxx*

All the material in this publication is copyright

© Pearson Education Ltd 2012

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 meaning of the phrase or the actual word is **essential** to the answer.

5 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 and candidates will be expected 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.
- 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, iii)	Comment on the possible social and economic impacts of the variations in spring rainfall shown on Figure 1.					
Series	Indicative content					
	<p>There are a number of social and economic potential impacts, either associated with too little rainfall or too much rainfall.</p> <p>Remember focus is impacts, but allow some credit for identification of patterns: most of England received 70% or below of the average 1971-2000. East, southeast, south-west and midlands were particularly dry i.e. less than 50% across a widespread area.</p> <p>North west Scotland (narrow strip) saw more rainfall than the average 1971-2000, but was generally close to the mean with rainfall.</p> <p>The map shows a much larger area of UK with rainfall deficiency, rather than excess, so expect responses to reflect this.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Too little rain - examples of possible impacts (S= Social, E = Economic)</th> <th style="width: 50%;">Too much rain - examples of possible impacts (S= Social, E = Economic)</th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top;"> <ul style="list-style-type: none"> • Hosepipe bans, water rationing in extreme circumstances (S) • Rivers drying out - impacts on fish stocks and recreational fishing etc. (S, E) • Possible impacts on inland boating - drying-up of canals (S) • Low reservoirs - impacts on tourism / leisure (S, E) • Impacts on agriculture - low productivity and crop failure = increase in local food prices (E) • Drought / dry conditions promote forest and heathland fires. (E) • Algal blooms / concentrations of agricultural runoff in lakes (S,E) • Drying of clays leading to building subsidence (E) </td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> • Property damage from flooding, or landslides, clay expansion (S, E) • Antecedent conditions may lead to a higher incidence of flash flooding if more rainfall occurs (E) • Loss of life due to flooding (S) • Impacts on agriculture and crops - waterlogged fields, food prices/ shortages (E) • People's inconvenience + misery, costs (S) • Negative impacts on tourism (wet so staying away) (E) </td> </tr> </tbody> </table> <p>The above are suggestions only - credit any reasonable ideas. Impacts may be positive as well as negative. Must be relevant to UK context.</p>		Too little rain - examples of possible impacts (S= Social, E = Economic)	Too much rain - examples of possible impacts (S= Social, E = Economic)	<ul style="list-style-type: none"> • Hosepipe bans, water rationing in extreme circumstances (S) • Rivers drying out - impacts on fish stocks and recreational fishing etc. (S, E) • Possible impacts on inland boating - drying-up of canals (S) • Low reservoirs - impacts on tourism / leisure (S, E) • Impacts on agriculture - low productivity and crop failure = increase in local food prices (E) • Drought / dry conditions promote forest and heathland fires. (E) • Algal blooms / concentrations of agricultural runoff in lakes (S,E) • Drying of clays leading to building subsidence (E) 	<ul style="list-style-type: none"> • Property damage from flooding, or landslides, clay expansion (S, E) • Antecedent conditions may lead to a higher incidence of flash flooding if more rainfall occurs (E) • Loss of life due to flooding (S) • Impacts on agriculture and crops - waterlogged fields, food prices/ shortages (E) • People's inconvenience + misery, costs (S) • Negative impacts on tourism (wet so staying away) (E)
Too little rain - examples of possible impacts (S= Social, E = Economic)	Too much rain - examples of possible impacts (S= Social, E = Economic)					
<ul style="list-style-type: none"> • Hosepipe bans, water rationing in extreme circumstances (S) • Rivers drying out - impacts on fish stocks and recreational fishing etc. (S, E) • Possible impacts on inland boating - drying-up of canals (S) • Low reservoirs - impacts on tourism / leisure (S, E) • Impacts on agriculture - low productivity and crop failure = increase in local food prices (E) • Drought / dry conditions promote forest and heathland fires. (E) • Algal blooms / concentrations of agricultural runoff in lakes (S,E) • Drying of clays leading to building subsidence (E) 	<ul style="list-style-type: none"> • Property damage from flooding, or landslides, clay expansion (S, E) • Antecedent conditions may lead to a higher incidence of flash flooding if more rainfall occurs (E) • Loss of life due to flooding (S) • Impacts on agriculture and crops - waterlogged fields, food prices/ shortages (E) • People's inconvenience + misery, costs (S) • Negative impacts on tourism (wet so staying away) (E) 					
Level	Mark	Descriptor				
Level 1	1-4	Basic with one or two limited and generalised ideas. Description only, no mention of meaningful impacts, unbalanced either social or economic. Lacks structure and very limited use of geographical terminology. Considerable errors in language.				
Level 2	5-7	Some aspects of Figure 1 commented on in the response. Uses at least one social and one economic impact to develop answer. Some structure and some written language errors.				
Level 3	8-10	A response with a range of both social and economic impacts, likely to refer to variations in rainfall on Figure 1. Uses Figure 1 effectively to develop a meaningful response. Well structured; written language errors are rare.				

Question Number	Question	
1(b) QWC (i, ii, iii)	Using examples, examine the evidence that suggests extreme weather events are becoming more frequent.	
Series	Indicative content	
	<p>Main drivers for probable increased frequencies may be linked to climate change and changes in land use. Responses may give details about flooding / high intensity rainfall events, drought, extreme temperatures, strong winds (hurricanes, tornadoes) etc.</p> <p>Evidence may be drawn from a number of different sources:</p> <ul style="list-style-type: none"> • Formal Met Office observations and recordings (UK), Weatherunderground (global) etc • Less formal anecdotal evidence, e.g. oral histories, books, magazines, other informal reporting. Tends to be localised and patchy spatial coverage. • Hurricane data (NOAA)- increasing frequency of North Atlantic storms since 1860 shows a positive trend upwards (intensity, however, is debatable) • Tornado data - sketchy evidence. • Insurance company data e.g. Munich Re <p>Best answers will have a focus on evidence, i.e. past records, events and sources, possibly linking to factors or causes which suggest change e.g. land use change, deforestation.</p> <p>They may suggest how data / evidence is often sketchy or incomplete, especially when looking at records back 100's of years. Better / more reporting of recent events is probably skewing the picture, as well as media interest in extreme weather.</p>	
Level	Mark	Descriptor
Level 1	1-4	Basic with one or two general ideas on extreme weather, or general causes of extreme weather. Limited attempt to exemplify or refer to evidence / frequency. Lacks structure and very limited use of geographical terminology. Considerable errors in language.
Level 2	5-7	Some examination of frequency with some reference to evidence. Exemplification present, but response restricted either in range and or depth. Some structure and some written language errors.
Level 3	8-10	A clear examination which refers to both evidence and frequency. Well structured response which uses examples effectively. Shows range and or detail through response. Written language errors are rare.

Question Number	Question					
1(c) QWC (i, ii, iii)	Describe the fieldwork and research you undertook to investigate how people attempt to manage the impacts of extreme weather, such as flooding.					
Series	Indicative content					
	<p>There are various ways of investigating the management of the impacts of extreme weather. Answers may rely more on research than fieldwork. Management of extreme weather impacts could involve a wide range of approaches, including strong links to flooding (prompted in question) as this is most practical in a UK context.</p> <table border="1"> <tr> <td>Fieldwork (primary):</td> <td>Basic mapping -flood defences and land-use, developing own flood risk maps. It may also be appropriate to physical characteristics e.g. river discharge, channel and bankful measurements, infiltration etc. Also credit fieldwork linked to the management of extreme weather impacts e.g. questionnaires, impacted group surveys.</td> </tr> <tr> <td>Research (secondary):</td> <td>Use of various sources to get a picture of flood or other extreme extent, especially GIS and Environment Agency maps; also flood risk maps for insurance companies; gauging station data, historic newspaper cuttings / reports and other documentary evidence e.g. newscasts referring to impact management. Meteorological data to monitor /understand events in order to reduce future impacts. The best responses will provide detailed evidence of specific sources e.g. specialist weather websites etc, rather than 'the internet'.</td> </tr> </table> <p>Provide credit for good detail on fieldwork e.g. correct terminology, sampling, pilot surveys etc</p>		Fieldwork (primary):	Basic mapping -flood defences and land-use, developing own flood risk maps. It may also be appropriate to physical characteristics e.g. river discharge, channel and bankful measurements, infiltration etc. Also credit fieldwork linked to the management of extreme weather impacts e.g. questionnaires, impacted group surveys.	Research (secondary):	Use of various sources to get a picture of flood or other extreme extent, especially GIS and Environment Agency maps; also flood risk maps for insurance companies; gauging station data, historic newspaper cuttings / reports and other documentary evidence e.g. newscasts referring to impact management. Meteorological data to monitor /understand events in order to reduce future impacts. The best responses will provide detailed evidence of specific sources e.g. specialist weather websites etc, rather than 'the internet'.
Fieldwork (primary):	Basic mapping -flood defences and land-use, developing own flood risk maps. It may also be appropriate to physical characteristics e.g. river discharge, channel and bankful measurements, infiltration etc. Also credit fieldwork linked to the management of extreme weather impacts e.g. questionnaires, impacted group surveys.					
Research (secondary):	Use of various sources to get a picture of flood or other extreme extent, especially GIS and Environment Agency maps; also flood risk maps for insurance companies; gauging station data, historic newspaper cuttings / reports and other documentary evidence e.g. newscasts referring to impact management. Meteorological data to monitor /understand events in order to reduce future impacts. The best responses will provide detailed evidence of specific sources e.g. specialist weather websites etc, rather than 'the internet'.					
Level	Mark	Descriptor				
Level 1	1-4	Very limited range of fieldwork / research described. Fieldwork/research will usually not be appropriate / linked to the impacts of extreme weather. Lacks structure. Considerable errors in language.				
Level 2	5-8	Basic description but with some statements with reference to either fieldwork or research. Lacks focus on the question of managing the impacts of extreme weather. 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 partly linked to management of impacts, but may lack balance and detail. 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 in detail, linked to managing the impacts of extreme weather; good use of own / group fieldwork; good use of terminology. Written language errors are rare.				

Question Number	Question					
2(a) QWC (i, ii, iii)	Study Figure 2. Comment on the evidence in Figure 2 which suggests that both locations are examples of crowded coasts.					
Series	Indicative content					
	<ul style="list-style-type: none"> The interpretation of what a 'crowded coast' is may vary considerably from student-to-student. Crowded may mean a wide variety of competing land-uses / pressure on space, number of competing users, too much local housing development, traffic / transport, visitor pressure, etc. Candidates may comment on the extent of crowding shown in the photos. They may argue that the coasts are not very crowded, or are crowded at different times of the year. <p>However, the photographs are central in providing evidence:</p> <table border="1"> <thead> <tr> <th>A (Taiwan)</th> <th>B (Lulworth)</th> </tr> </thead> <tbody> <tr> <td> <p><i>What the image shows:</i> Flat topography, mangrove (evidence of litter) in the foreground = estuarine / low energy / brackish conditions. Mud flats. Woodland (natural / primary forest) in the middle and far distance. Could be seen as low quality, polluted, and environmentally degraded.</p> <p><i>Evidence of crowding:</i> High density, high-rise housing on far side of estuary (flat coastal strip used for development), can identify a large settlement (or suburb). In the foreground there is an absence of housing, appears 'natural' (mangrove). Background is heavily wooded and appears steep, indicating less impact of crowding.</p> </td> <td> <p><i>What the image shows:</i> Cove dominates coastal scenery, coastline stretching off into distance. Close inspection reveals banding from particular geology + gravel bay / beach. May suggest building types (pub, hotel, visitor centre).</p> <p><i>Evidence of crowding:</i> Car park is most obvious feature indicating crowding from visitors rather than residents; cars spilling up the field indicating busy / popular. Concentration of housing / buildings, although few people actually live in the location. Rest of landscape looks un-crowded, but footpaths indicate it is used.</p> </td> </tr> </tbody> </table> <p>Give some credit for a description (i.e. the evidence), but for L2 and L3 this must be explicitly linked to the idea of crowding. Also anticipate that candidates will make use of the grid system to give explicit references of features.</p>		A (Taiwan)	B (Lulworth)	<p><i>What the image shows:</i> Flat topography, mangrove (evidence of litter) in the foreground = estuarine / low energy / brackish conditions. Mud flats. Woodland (natural / primary forest) in the middle and far distance. Could be seen as low quality, polluted, and environmentally degraded.</p> <p><i>Evidence of crowding:</i> High density, high-rise housing on far side of estuary (flat coastal strip used for development), can identify a large settlement (or suburb). In the foreground there is an absence of housing, appears 'natural' (mangrove). Background is heavily wooded and appears steep, indicating less impact of crowding.</p>	<p><i>What the image shows:</i> Cove dominates coastal scenery, coastline stretching off into distance. Close inspection reveals banding from particular geology + gravel bay / beach. May suggest building types (pub, hotel, visitor centre).</p> <p><i>Evidence of crowding:</i> Car park is most obvious feature indicating crowding from visitors rather than residents; cars spilling up the field indicating busy / popular. Concentration of housing / buildings, although few people actually live in the location. Rest of landscape looks un-crowded, but footpaths indicate it is used.</p>
A (Taiwan)	B (Lulworth)					
<p><i>What the image shows:</i> Flat topography, mangrove (evidence of litter) in the foreground = estuarine / low energy / brackish conditions. Mud flats. Woodland (natural / primary forest) in the middle and far distance. Could be seen as low quality, polluted, and environmentally degraded.</p> <p><i>Evidence of crowding:</i> High density, high-rise housing on far side of estuary (flat coastal strip used for development), can identify a large settlement (or suburb). In the foreground there is an absence of housing, appears 'natural' (mangrove). Background is heavily wooded and appears steep, indicating less impact of crowding.</p>	<p><i>What the image shows:</i> Cove dominates coastal scenery, coastline stretching off into distance. Close inspection reveals banding from particular geology + gravel bay / beach. May suggest building types (pub, hotel, visitor centre).</p> <p><i>Evidence of crowding:</i> Car park is most obvious feature indicating crowding from visitors rather than residents; cars spilling up the field indicating busy / popular. Concentration of housing / buildings, although few people actually live in the location. Rest of landscape looks un-crowded, but footpaths indicate it is used.</p>					
Level	Mark	Descriptor				
Level 1	1-4	Basic and generalised description. Uses limited evidence from photograph (s), may be inaccurate. Limited comments on crowding. Lacks structure and very limited use of geographical terminology. Considerable errors in language.				
Level 2	5-7	Some use of evidence from both images, but likely to be restricted in depth and range of comments. Evidence lacks detail, but there is some link to the idea that these are crowded coast. Some structure and some written language errors. Max 6 if one image only.				
Level 3	8-10	A response where a range of evidence from both images is used in detail; comments link clearly to idea of crowded coasts. Well structured; written language errors are rare.				

Question Number		Question
2(b) QWC (i, ii, iii)		Using examples, examine the factors that have led to economic and population growth in some coastal locations.
Series		Indicative content
		<p>There are a number of drivers of economic and population growth. Expect responses to include reference to some of the following:</p> <ul style="list-style-type: none"> • Historical - development of fishing industries / ports (source of food / nourishment) and development of the seaside resort, especially in Victorian times (influence of increased accessibility from rail and better jobs leading to higher incomes and leisure time). • Mass tourism economic growth: 1950s + 1960's holiday camps: development of the package holiday: 1990s low cost air carriers increased accessibility of the coastal resort - leading to more growth, development and bigger economies in many instances. • Climate - retirement populations (both from within countries) and overseas, e.g. Spanish Costas, UK south coast. • Physical geography - makes some coastal sites good for economic development especially gas and offshore oil, ports, container ports e.g. flat land, remoteness, natural harbour. Natural resources located at the coast. • Landscape / attractiveness of the location - e.g. Torquay, Dartmouth may also attract businesses (especially tourism) and people (retirement). • Energy - development in terms of new alternative energy sources (tidal, wind farms), so another potential for growth (economic and or population). <p>NB: economic and population growth are strongly linked. Examples can be taken as locations or as examples of factors.</p>
Level	Mark	Descriptor
Level 1	1-4	Basic description with one or two general ideas / reasons for growth. Limited exemplification. Lacks structure and very limited use of geographical terminology. Considerable errors in language.
Level 2	5-7	An outline of a number of factors responsible for growth of population and / or economy, but limited in terms of range and depth. Exemplification present, but maybe restricted in detail. Some structure and some written language errors.
Level 3	8-10	An examination of a range of factors which refers to both economic and population growth. Uses example(s) effectively with some depth and detail: well structured and balanced. Written language errors are rare.

Question Number		Question						
2(c) QWC (i, ii, iii)		Describe the fieldwork and research you undertook to investigate one of the following: <ul style="list-style-type: none"> • Rates of coastal erosion • Degree of coastal flood risk 						
Series		Indicative content						
		<p>There are various ways of using the fieldwork and research to investigate these topics - some ideas are summarised below:</p> <table border="1"> <tbody> <tr> <td>Fieldwork: Coastal Flooding</td> <td>Questionnaires and interviews to local people, oral histories, photographs and videos may all provide ideas linked to areas at risk of flooding. Some of this field evidence may be qualitative. Completing land use and /or flood risk maps to determine areas at risk. GPS to determine altitudes (linked to risk).</td> </tr> <tr> <td>Fieldwork: Coastal Erosion</td> <td>Questionnaires and interviews to local people, oral histories, photographs and videos may all provide ideas on the rate of erosion. Cliff geology (rock type) and other coastal surveys (linked to rate); surveys of wave type, measuring longshore drift / sediment change or mapping evidence of erosion.</td> </tr> <tr> <td>Research (secondary):</td> <td>Rates of erosion via old maps. Also use of old postcards - before and after. GIS is relevant, e.g. EA website. Also shoreline management plans. Geology maps. Actual records of erosion rates and flood incidents.</td> </tr> </tbody> </table> <p>Also provide credit for good detail on fieldwork, e.g. correct terminology, sampling, pilot surveys etc.</p>	Fieldwork: Coastal Flooding	Questionnaires and interviews to local people, oral histories, photographs and videos may all provide ideas linked to areas at risk of flooding. Some of this field evidence may be qualitative. Completing land use and /or flood risk maps to determine areas at risk. GPS to determine altitudes (linked to risk).	Fieldwork: Coastal Erosion	Questionnaires and interviews to local people, oral histories, photographs and videos may all provide ideas on the rate of erosion. Cliff geology (rock type) and other coastal surveys (linked to rate); surveys of wave type, measuring longshore drift / sediment change or mapping evidence of erosion.	Research (secondary):	Rates of erosion via old maps. Also use of old postcards - before and after. GIS is relevant, e.g. EA website. Also shoreline management plans. Geology maps. Actual records of erosion rates and flood incidents.
Fieldwork: Coastal Flooding	Questionnaires and interviews to local people, oral histories, photographs and videos may all provide ideas linked to areas at risk of flooding. Some of this field evidence may be qualitative. Completing land use and /or flood risk maps to determine areas at risk. GPS to determine altitudes (linked to risk).							
Fieldwork: Coastal Erosion	Questionnaires and interviews to local people, oral histories, photographs and videos may all provide ideas on the rate of erosion. Cliff geology (rock type) and other coastal surveys (linked to rate); surveys of wave type, measuring longshore drift / sediment change or mapping evidence of erosion.							
Research (secondary):	Rates of erosion via old maps. Also use of old postcards - before and after. GIS is relevant, e.g. EA website. Also shoreline management plans. Geology maps. Actual records of erosion rates and flood incidents.							
Level	Mark	Descriptor						
Level 1	1-4	Very limited range of fieldwork / research described. Fieldwork/research will usually not be appropriate / linked to the coastal flooding / erosion. Lacks structure. Considerable errors in language.						
Level 2	5-8	Basic description but with some statements with reference to either fieldwork or research. Lacks focus on the question of erosion / coastal flooding. 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 partly linked to erosion rates / flood risk, but may lack balance and detail. 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 in detail, linked rates of coastal erosion/ coastal flood risk; good use of own / group fieldwork; good use of terminology. Written language errors are rare.						

Question Number	Question					
3(a) QWC (i, ii, iii)	Study Figure 3. Comment on the reasons for, and possible impacts of, the different broadband speeds.					
Series	Indicative content					
	<p>This is both a 'reasons' and 'impacts' focused question. Figure 3 focuses on the speed of internet access. Candidates should be rewarded for description at lower levels as this is linked to reasons, but this alone is not sufficient to get a top-band mark.</p> <table border="1"> <thead> <tr> <th>Possible reasons for speed differences</th> <th>Possible impacts of the differences:</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> Remote areas e.g. villages, hamlets have fewer people so it is less economic to provide fast broadband (cost of infrastructure / fibre optic cables) Physical geography may be a barrier, coasts, mountains etc. Fewer telephone exchanges (feature of population density) mean increased distances and slower speeds. Isolated properties are expensive to provide high speed cabling to. </td> <td> <ul style="list-style-type: none"> Low speed restricts number of entrepreneurial business start-ups / micro-businesses, and important part of economy for buying and selling goods, sending data +information etc. Low speeds mean that householders cannot access the full range of internet + TV services e.g. iPlayer etc. Broadband provides employment opportunities, low speed limits the number of remote workers / tele-working. May also impact indirectly on tourism - people expect to be able to access internet / email / social networks etc even when on holiday. Restricts access to online services (government, councils). </td> </tr> </tbody> </table> <p>Expect use of data from Figure 3 to support responses. NB: it is not clear from the resource whether this is a wired or mobile / 3G connection, so accept reasons such as hilly topography.</p>		Possible reasons for speed differences	Possible impacts of the differences:	<ul style="list-style-type: none"> Remote areas e.g. villages, hamlets have fewer people so it is less economic to provide fast broadband (cost of infrastructure / fibre optic cables) Physical geography may be a barrier, coasts, mountains etc. Fewer telephone exchanges (feature of population density) mean increased distances and slower speeds. Isolated properties are expensive to provide high speed cabling to. 	<ul style="list-style-type: none"> Low speed restricts number of entrepreneurial business start-ups / micro-businesses, and important part of economy for buying and selling goods, sending data +information etc. Low speeds mean that householders cannot access the full range of internet + TV services e.g. iPlayer etc. Broadband provides employment opportunities, low speed limits the number of remote workers / tele-working. May also impact indirectly on tourism - people expect to be able to access internet / email / social networks etc even when on holiday. Restricts access to online services (government, councils).
Possible reasons for speed differences	Possible impacts of the differences:					
<ul style="list-style-type: none"> Remote areas e.g. villages, hamlets have fewer people so it is less economic to provide fast broadband (cost of infrastructure / fibre optic cables) Physical geography may be a barrier, coasts, mountains etc. Fewer telephone exchanges (feature of population density) mean increased distances and slower speeds. Isolated properties are expensive to provide high speed cabling to. 	<ul style="list-style-type: none"> Low speed restricts number of entrepreneurial business start-ups / micro-businesses, and important part of economy for buying and selling goods, sending data +information etc. Low speeds mean that householders cannot access the full range of internet + TV services e.g. iPlayer etc. Broadband provides employment opportunities, low speed limits the number of remote workers / tele-working. May also impact indirectly on tourism - people expect to be able to access internet / email / social networks etc even when on holiday. Restricts access to online services (government, councils). 					
Level	Mark	Descriptor				
Level 1	1-4	Description of Figure 3 using some of the data provided; may recognise differences, but reasons and impacts are absent or generalised. Lacks structure and considerable errors in language.				
Level 2	5-7	A range of descriptive comments linked to Figure 3; provides some reasons and / or impacts but these are not developed. Likely to use data appropriately. Some structure; there are some written language errors.				
Level 3	8-10	A clear response with links to Figure 3, providing some reasons and impacts, with some detail and use of specific items of data to support ideas. Well structured. Written language errors are rare.				

Question Number		Question
3(b) QWC (i, ii, iii)		Using examples, explain how inequality can have impacts on people living in urban areas.
Series		Indicative content
		<p>Inequalities could result from poor access, lack of investment, lack of ability to afford services, areas with a long history of lack of provision. There are a range of impacts that result from inequality in urban areas:</p> <ul style="list-style-type: none"> • Technology e.g. mobile phone reception, wi-fi, high speed broadband etc. Affects quality of life, ability to work remotely, access online services. • Transport e.g. bus / train / rail / port infrastructure (proximity and frequency, investment). Restricts choice and availability; ability to get work, access services and amenities. • Lack of places for entertainment and leisure (affordability and availability). Limited range reduces quality of life, choice. • Basic services such as electricity, sanitation in urban spaces in the developing world - impact on health, quality of life, life-span. • Healthcare - quality, distance and affordability. Bigger impacts in terms of life expectancies, infant mortality rates etc. Seen in large cities. • Education quality and availability, choice - impacts on future opportunities, earning potential. • Discrimination (ethnicity, race, religion) - impacts on choice of area to live in, and subsequent on services, housing etc. • Employment (low pay, seasonal) restricts income. • Government funding policy on different urban projects - e.g. refusal to improve certain areas. <p>Inequality impacts will be worse where it is difficult to access services, but it may affect different groups (e.g. the elderly, the young, unemployed, single parents, disabled, ethnic minorities etc) to different degrees. Credit such ideas.</p> <p>Candidates may just do MEDC or LEDC, or both. Must be urban.</p>
Level	Mark	Descriptor
Level 1	1-4	Identifies or describes some aspect of inequality. Very limited linkage to impacts, lacking explanation. Exemplification very weak or absent. Little structure and very limited use of geographical terminology. Considerable errors in language.
Level 2	5-7	Response shows some understanding of how inequality creates impacts in an urban area. Uses at least one example to support response. Some structure. Likely to be lacking in either range or depth. There are some written language errors.
Level 3	8-10	A clear response which explains how inequality this leads to different impacts on people in urban areas. Impacts are exemplified. Well structured and balanced response in which written language errors are rare.

Question Number		Question
3(c) QWC (i, ii, iii)		For either an urban or rural area, describe the results of your fieldwork and research into the success of schemes to reduce inequalities.
Series		Indicative content
		<p>Note: use a wide interpretation of 'results', to include aspects of actual data, as well as analysis and conclusions if relevant. Examples include:</p> <ul style="list-style-type: none"> • Results are outcomes so very much individual based on findings. • Expect data and real places to be used in the best responses. • Also credit analysis: using a range of simple statistics may also be appropriate e.g. mode, mean and median; also inter quartile ranges for some of the quantitative data collected such as retail quality, diversity, footfalls etc. • Other ways of analysing data may be more descriptive for qualitative, e.g. open-coding, geographical narratives, précising (of extended interviews), conceptual frameworks, and a written commentary to accompany a video / DVD or series of images, e.g. analysis of pictures of change through a timeline. • Provide a summary of the data: patterns, trends and anomalies as revealed through the analysis of the range of data, e.g. functional change, photos, interviews etc. • May include evaluation + comments on reliability. <p>Expect a wide variety of ideas discussed. Level 3 and 4 answers should describe the end of the research / fieldwork process (not just how it was done - but this may provide a context for the answer).</p> <p>Credit presentation if relevant to results.</p> <p>Expect answers to focus on named schemes and their success or otherwise.</p>
Level	Mark	Descriptor
Level 1	1-4	A description of fieldwork / research in a narrative style, little or no reference to results described. Place / location not mentioned or recognisable. Does not refer to schemes. Lacks structure. Considerable errors in language.
Level 2	5-8	Description of some fieldwork / research that lacks focus on the question e.g. methods rather than results. One or two statements about results linked to inequality. Lacking in detail, but has a recognisable area / schemes. Expect limited use of geographical terminology. There are some written language errors.
Level 3	9-12	Describes some results of fieldwork and research into inequality, but may lack details. Expect some link to the success of scheme (s) within a named area at the top end. Some use of geographical terminology. Response shows some structure, limited written language errors. Max 10 if response does not include results from both fieldwork and research.
Level 4	13-15	Structured account which describes a range of fieldwork and research results in detail; shows good use of own / group fieldwork, with good use of terminology. Clear linkage to the success of schemes to reduce inequality in a named area (s). Written language errors are rare.

Question Number		Question
4(a) QWC (i, ii, iii)		Study Figure 4 Comment on the usefulness of the three fieldwork approaches to investigate rural rebranding.
Series		Indicative content
		<p>All are potentially useful fieldwork tools, but how well they would work may be dependent on a number of factors:</p> <ul style="list-style-type: none"> • Questionnaires - design and layout of questions, relevance, quality, sequencing, open versus closed questions, sample size / number of visitors, weather. Doing a pilot survey prior to the main survey. • Activity surveys - business of site, potential viewpoints, permissions / access, weather, number of visitors. • Photographs - quality of equipment, ability of photographer to be geographical, quality of interpretation following, i.e. annotation. <p>The three approaches that are indicated provide a reasonably restricted range of primary data collection techniques. There are also just 'snapshot' survey techniques.</p> <p>Of course there are other possible ways of judging the success of rural rebranding which may include other fieldwork techniques, such as some kind of environmental quality survey, interviews (especially with people who work there). Also research - old photographs, maps and other documentary sources of evidence. Perhaps the key to investigating rebranding (and whether it has worked) lies in the 'before' and 'after' approaches.</p>
Level	Mark	Descriptor
Level 1	1-4	Description of what the techniques do, dependent on wording from Figure 4. No comment relating to usefulness, or links to rural rebranding. Lacks structure and considerable errors in language.
Level 2	5-7	Some descriptive comments linked to the Figure including one or two ideas regarding usefulness. Comments on two or more approaches, limited link to rural rebranding. Some structure; there are some written language errors.
Level 3	8-10	A clear response with details about all three approaches - in the context of rural rebranding. Comments on usefulness. Likely to use own knowledge and understanding to develop ideas more fully. Well structured; written language errors are rare.

Question Number	Question	
4(b) QWC (i, ii, iii)	Using examples, explain how environmental and economic decline have led to the need to rebrand urban areas.	
Series	Indicative content	
	<p>Rebranding can be used as a tool or catalyst to improve quality of places. This in turn can 'kick-start' economies and lead to a cascade of positive effects. There are a number of factors that can mean that rebranding is needed, these can of course include social, economic and environmental (there is sometimes little divide between the three) factors. Credit the main focus on economic and environmental, rather than social.</p> <p>Economic factors are often linked to a decline of CBD, linked to loss of retailing function and competition from other areas, e.g. internet and out-of-town. This has been accompanied by a loss of commercial function. Other areas have seen loss of industry such as shipbuilding, car manufacture, small workshops or coal mining. Coastal areas (urban places) also have their own special set of economic problems that lead to a need to rebrand (competition from overseas travel, decline of fishing).</p> <p>Environmental factors are very much linked - low quality of life caused by poor quality environments creating spiral of decline, lack of opportunity, feeling of loss and neglect etc. Some environmental problems are linked to deprivation, lack of access and opportunity (jobs / employment, health, recreation / leisure).</p> <p>Other areas where there has been change of use, e.g. deindustrialisation has left dereliction, abandoned plots.</p> <p>Note: urban only. Do not credit how places have rebranded. The focus of the question is the need for rebranding.</p>	
Level	Mark	Descriptor
Level 1	1-4	Descriptive answer with a few generalised ideas on why rebranding is needed. Lacks structure and very limited use of geographical terminology. Limited or no reference to examples. Considerable errors in language.
Level 2	5-7	Some structure. Likely to be lacking in either range or depth, but shows some understanding of why some urban areas need to rebrand; environmental and / or economic factors are mentioned. Reference to at least one example. There are some written language errors.
Level 3	8-10	A clear response which shows understanding of both environmental and economic factors linked to why urban areas need to rebrand. Well structured and balanced response. Reference to places / examples. Written language errors are rare.

Question Number		Question
4(c) QWC (i, ii, iii)		
Series		Indicative content
		<p>Note: use a wide interpretation of 'results', to include aspects of actual data, as well as analysis and conclusions if relevant. Examples include:</p> <ul style="list-style-type: none"> • Results are outcomes so very much individual based on findings. • Expect data and real places to be used in the best responses. • Also credit analysis: using a range of simple statistics may also be appropriate e.g. mode, mean and median; also inter quartile ranges for some of the quantitative data collected such as retail quality, diversity, footfalls etc. • Other ways of analysing data may be more descriptive for qualitative, e.g. open-coding, geographical narratives, précising (of extended interviews), conceptual frameworks, and a written commentary to accompany a video / DVD or series of images, e.g. analysis of pictures of change through a timeline. • Provide a summary of the data: patterns, trends and anomalies as revealed through the analysis of the range of data, e.g. functional change, photos, interviews etc. • May include evaluation + comments on reliability. <p>Expect a wide variety of ideas discussed. Level 3 and 4 answers should describe the end of the research / fieldwork process (not just how it was done - but this may provide a context for the answer). Credit presentation if relevant to results.</p> <p>Expect answers to focus on named schemes and their success or otherwise.</p>
Level	Mark	Descriptor
Level 1	1-4	A description of fieldwork / research in a narrative style, little or no reference to results described. Place / location not mentioned or recognisable. Does not refer to schemes. Lacks structure. Considerable errors in language.
Level 2	5-8	Description of some fieldwork / research that lacks focus on the question e.g. methods rather than results. One or two statements about results linked to rebranding. Lacking in detail, but has a recognisable area / schemes. Expect limited use of geographical terminology. There are some written language errors.
Level 3	9-12	Describes some results of fieldwork and research into rebranding, but may lack details. Expect some link to the success of scheme (s) within a named area at the top end. Some use of geographical terminology. Response shows some structure, limited written language errors. Max 10 if response does not include results from both fieldwork and research.
Level 4	13-15	Structured account which describes a range of fieldwork and research results in detail; shows good use of own / group fieldwork, with good use of terminology. Clear linkage to the success of rebranding schemes in a named area (s). Written language errors are rare.