

A-level

Geography

GEOG3 Contemporary Geographical Issues

Mark scheme

2030
June 2015

Version 1.0 Final

Mark schemes are prepared by the Lead Assessment Writer and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all associates participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the students' responses to questions and that every associate understands and applies it in the same correct way. As preparation for standardisation each associate analyses a number of students' scripts: alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, associates encounter unusual answers which have not been raised they are required to refer these to the Lead Assessment Writer.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of students' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

Further copies of this Mark Scheme are available from aqa.org.uk

GEOG3 General Guidance for GCE Geography Assistant Examiners

The mark scheme for this unit includes an overall assessment of quality of written communication. There are no discrete marks for the assessment of written communication but where questions are 'Level' marked, written communication will be assessed as one of the criteria within each level.

- Level 1:** Language is basic, descriptions and explanations are over simplified and lack clarity.
- Level 2:** Generally accurate use of language; descriptions and explanations can be easily followed, but are not clearly expressed throughout.
- Level 3:** Accurate and appropriate use of language; descriptions and explanations are expressed with clarity throughout.
- Level 4:** Accurate and mature use of language; descriptions and explanations are expressed coherently and confidently

Marking – the philosophy

Marking is positive and not negative.

Mark schemes – layout and style

The mark scheme for each question will have the following format:

- a) Notes for answers (nfa) – exemplars of the material that might be offered by candidates
- b) Mark scheme containing advice on the awarding of credit and levels indicators.

Point marking and levels marking

- a) Questions with a mark range of 1-4 marks will be point marked.
- b) Levels will be used for all questions with a tariff of 5 marks and over.
- c) Two levels only for questions with a tariff of 5 to 8 marks.
- d) Three levels to be used for questions of 9 to 15 marks.
- e) Four levels to be used for questions of 40 marks.

Levels Marking – General Criteria

Everyone involved in the levels marking process (examiners, teachers, students) should understand the criteria for moving from one level to the next – the 'triggers'. The following general criteria are designed to assist all involved in determining into which band the quality of response should be placed. It is anticipated that candidates' performances under the various elements will be broadly inter-related. Further development of these principles will be discussed during the standardisation process. In broad terms the levels will operate as follows:

Level 1: attempts the question to some extent (basic)

An answer at this level is likely to:

- display a basic understanding of the topic
- make one or two points without support of appropriate exemplification or application of principle
- give a basic list of characteristics, reasons and attitudes
- provide a basic account of a case study, or provide no case study evidence
- give a response to one command of a question where two (or more) commands are stated e.g. “describe and suggest reasons”
- demonstrate a simplistic style of writing perhaps lacking close relation to the terms of the question and unlikely to communicate complexity of subject matter
- lack organisation, relevance and specialist vocabulary
- demonstrate deficiencies in legibility, spelling, grammar and punctuation which detract from the clarity of meaning.

Level 2: answers the question (well/clearly)

An answer at this level is likely to:

- display a clear understanding of the topic
- make one or two points with support of appropriate exemplification and/or application of principle
- give a number of characteristics, reasons, attitudes
- provide clear use of case studies
- give responses to more than one command e.g. “describe and explain...”
- demonstrate a style of writing which matches the requirements of the question and acknowledges the potential complexity of the subject matter
- demonstrate relevance and coherence with appropriate use of specialist vocabulary
- demonstrate legibility of text, and qualities of spelling, grammar and punctuation which do not detract from the clarity of meaning.

Level 3: answers the question very well (detailed)

An answer at this level is likely to:

- display a detailed understanding of the topic
- make several points with support of appropriate exemplification and/or application of principle
- give a wide range of characteristics, reasons, attitudes
- provide detailed accounts of a range of case studies
- respond well to more than one command
- demonstrate evidence of discussion, evaluation, assessment and synthesis depending on the requirements of the assessment
- demonstrate a sophisticated style of writing incorporating measured and qualified explanation and comment as required by the question and reflecting awareness of the complexity of subject matter and incompleteness/ tentativeness of explanation
- demonstrate a clear sense of purpose so that the responses are seen to closely relate to the requirements of the question with confident use of specialist vocabulary
- demonstrate legibility of text, and qualities of spelling, grammar and punctuation which contribute to complete clarity of meaning.

Level 4: answers the question with depth, flair, creativity and insight

In addition to the requirements of Level 3, an answer at this level is likely to:

- provide strong evidence of thorough, detailed and accurate knowledge and critical understanding of concepts and principles and of specialist vocabulary.
- give explanations, arguments and assessments or evaluations that are direct, logical, perceptive, purposeful, and show both balance and flair.
- demonstrate a high level of insight, and an ability to identify, interpret and synthesise a wide range of material with creativity.
- demonstrate evidence of maturity in understanding the role of values, attitudes and decision-making processes.

Annotation of Scripts

It is most important that examiners mark clearly, according to the procedures set out below.

- All marking should be done in red (except online marking).
- The right hand margin should be used for marks only.
- The overall mark for a question must be ringed at the end of the answer.
- The total mark for the question must be transferred to the front of the script.
- Where an answer is marked using a levels response scheme, the examiner should annotate the scripts with 'L1', 'L2', 'L3' or 'L4' at the point where that level has been reached in the left hand margin. In addition, examiners may want to indicate strong material by annotating the script as 'Good Level...'. Further commentary may also be given at the end of the answer. The consequent mark should then appear in the right-hand column. Where an answer fails to achieve Level 1, zero marks should be given.

Other mechanics of marking

- All errors and contradictions should be underlined.
- Various codes may be used such as: 'rep' (repeated material), 'va' (vague), 'NAQ' (not answering question), 'seen', etc.
- Use a wavy line to indicate weak dubious material (avoiding crossing out).
- If the rubric is contravened, then all answers should be marked, but with the best answer being counted and the mark transferred to the front of the script. Then cross out the material which has been discounted.
- Unless indicated otherwise, always mark text before marking maps and diagrams. Do not give double credit for the same point in text and diagrams.

Section A**Option 1 – Plate Tectonics and Associated Hazards**

01	<p>Notes for answers:</p> <p>The photo shows the impact of the eruption in 2010 of Mount Merapi. There is an ash cloud in the distance with associated rain cloud around it. The ash has fallen on the land, houses and roads in the area in the foreground. There is also evidence of a blast effect with all of the trees shed of their leaves, and tiles have been blown off the roof of the house on the left. Some of this damage could have been caused by the weight of the ash fall too. There is a distinct grey colouring of the entire area caused by the ash fall. The telephone lines have also been brought down.</p> <p>The area will be devoid of people – at the moment, it would be impossible to live in such area. Dwellings, gardens, and farm land would have been destroyed presenting significant social, economic and environmental problems for the locale. It is difficult to envisage how such an area could be resettled – certainly not in the short term with the eruption. People will have lost everything.</p> <p>Mark scheme</p> <p>Level 1 (1-4 marks) Basic (mid point 3) Basic statements of impacts from the photograph such as ash cloud, damaged buildings, deposits of ash with basic/no comment on any aspect. Max 1 for only one impact.</p> <p>Level 2 (5-7 marks) Clear (mid point 6) Clear description and comment on the nature of the impacts seen/suggested. Evidence of geographical thinking such as wider or longer term impacts.</p>	[7 marks]
----	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------

02	<p>Notes for answers:</p> <p>Plates move away from each other and new crust is continually being created (particularly under the oceans). The main features formed are:</p> <ul style="list-style-type: none"> • Mid-oceanic ridges – these (eg. MAR) are long (they run for thousands of kilometres), high (rising in some areas over 3000m from the ocean floor) and often with complex structures of rifts and scarps. Transform faults occur at right angles to the main plate boundary. • Volcanoes – volcanic activity occurs along mid-oceanic ridges, sometimes rising above sea level to produce islands (eg. Surtsey, off Iceland). Such volcanoes are formed from basaltic lava which has a low viscosity and flows great distances, creating volcanoes with gentle sides. Volcanoes also form in association with rift valleys, especially in east Africa. Expect reference to viscosity and explosive nature for example. Allow lava plateaux etc. • Rift valleys – form at constructive boundaries on continental areas due to the fracturing of brittle crust. Areas of crust drop down between parallel faults to form the feature. The best known is the east African rift valley which extends from Mozambique through eastern Africa and the Red Sea to Jordan in the middle east, a distance of 5500km. In some areas the inward-facing scarps are over 600m above the valley floor. This African rift is thought to be an emerging plate boundary as east Africa splits from the rest of the continent. <p>Mark scheme</p> <p>Level 1 (1-4 marks) Basic (mid point 3) Basic statements of characteristics/causes, lacking detail or sophistication of either features or processes. One landform only.</p> <p>Level 2 (5-8 marks) Clear (mid point 6) Clear statements of characteristics and reasoning, possibly with some use of supportive material, for two or more of landforms. The answer progresses through the level as more is added at this level. Full mark answers show breadth of knowledge.</p>	[8 marks]
----	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------

03	<p>Notes for answers:</p> <p>In general terms:</p> <p>Prediction</p> <ul style="list-style-type: none"> • study the eruption history of the volcano. • measure gas emissions, land swelling, groundwater levels. • measure the shock waves generated by magma travelling upwards. <p>Prevention</p> <ul style="list-style-type: none"> • evacuation following warnings. <p>Protection</p> <ul style="list-style-type: none"> • hazard assessment – trying to determine the areas of greatest risk which should influence land use planning. • dig trenches to divert the lava. • build barriers to slow down lava flows. • explosive activity to try to divert a lava flow. • pour water on the lava front to slow it down. <p>As the questions states, any of the above would need to be supported with case study exemplars.</p> <p>Mark scheme</p> <p>Level 1 (1-4 marks) Basic (mid point 3) Basic statements of management which could apply to any volcanic hazard. No specific detail provided.</p> <p>Level 2 (5-8 marks) Clear (mid point 6) Clear statements of management strategies which can be clearly attributed to examples access this level. Discussion must be clearly recognisable for 7/8 marks.</p> <p>Level 3 (9-10 marks) Detailed (mid point 9) A fully developed answer, with detailed elaboration of the management strategies. A rounded answer with a full discussion.</p>	[10 marks]
----	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------

Option 2 – Weather and Climate and Associated Hazards

04	<p>Notes for answers:</p> <p>On the whole ocean surface temperatures appear to have warmed over the time period, but this warming is not consistent. There are regional variations in this trend. Areas to the east of continents (such as North America, Asia, South America) have had relatively large increases – over 2 degrees. The extreme North Atlantic is also an area of significant warming. The North Sea and the NW coast of Mexico have had similar warming – though these are on the western side of continents. There are some areas where ocean surface temperatures have decreased – western southern Africa, off the coast of Florida, and north of Antarctica. Candidates are likely to link the warming effect to global warming, and we should credit any appropriate comment that links this data to a specific GW impact. For example, some may suggest that the warming of the North Atlantic for example will result in the melting of the polar ice. Some may also speculate on the likely impact on the North Atlantic Conveyor. Some of the colder areas can be linked to cold ocean currents – eg. the Benguela current. The temperature of the ‘core’ of many ocean appears to be unchanged – so could the peripheral changes be more due to changes in oceanic circulation – eg. el Nino/La Nina?</p> <p>Comment may consider increased likelihood of storms. Generic causes of GW should not be credited. Some may comment on the usefulness of the resource.</p> <p>Mark scheme</p> <p>Level 1 (1-4 marks) Basic (mid point 3) Basic statements of changes from the image such as the location of warmer areas and colder areas, with basic / no comment on any aspect (other than a simple link to GW).</p> <p>Level 2 (5-7 marks) Clear (mid point 6) Comment on the changes seen/suggested. Evidence of geographical thinking such as wider or longer term impacts/influences.</p>	[7 marks]
-----------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------

05	<p>Notes for answers:</p> <p>Possible impacts of global warming on the BI:</p> <ul style="list-style-type: none"> warmer and wetter climate; seasonal rainfall increases in intensity, southern Britain more likely to experience a Mediterranean climate although the north and west could be much wetter. Storms may increase in frequency and intensity. Some predict colder winters. coastal flooding increases as sea levels rise, rivers are also expected to flood more frequently and flooding events are predicted to worsen in magnitude. More investment in coastal and river basin management, otherwise population will be displaced. changes in agricultural practices and crops eg. maize, vines and other Mediterranean produce. More irrigation may be necessary in some areas. water supply may become a problem in some areas during the summer, leading to restrictions such as hose pipe bans. increases in pests and diseases, eg. malarial mosquitos may spread to the British Isles. <p>Mark scheme</p> <p>Level 1 (1-4 marks) Basic (mid point 3) Basic statements of effects, which may be generic. Little or weak sense of focus upon likely impacts for the British Isles.</p> <p>Level 2 (5-8 marks) Clear (mid point 6) Clear statements of effects, which are rooted in the BI and appropriately linked to current body of knowledge on global warming. Description may move into linked consequences for other aspects, such as river discharges, ecology, agriculture though climatic changes are clear.</p>	[8 marks]
06	<p>Notes for answers</p> <p><i>International scale:</i></p> <p>The Earth Summit in 1992 took place in Rio de Janeiro Brazil. This was a meeting of most of the world's countries and an agreement called 'Agenda 21' was passed. One of the aims of this was to cut environmental pollution to conserve resources and to protect natural habitats and wildlife.</p> <p>The Kyoto Protocol was an international agreement signed by more than 100 countries in Kyoto, Japan in 1997 whose aim was to halt climate change. Countries made pledges to cut down their carbon emissions by agreed amounts by 2010. By 2006, it had been ratified by 162 countries, but the USA was criticised for refusing to adhere to it. This treaty expired in 2012.</p> <p>The Copenhagen Conference of 2009 had limited success. A motion was passed at the end of the conference to recognise the following deal which was brokered by President Obama with the leaders of China, India, Brazil and South Africa:</p>	[10 marks]

	<ul style="list-style-type: none"> • there would be no legally binding agreement to reduce carbon emissions • there is a need to limit global temperatures rising to no more than 2°C above pre-industrial levels • that developed countries promise to deliver \$30bn of aid to developing nations over the next three years, and have ‘set a goal of mobilising jointly \$100bn a year by 2020 to address the needs of developing countries’ in coping with the impacts of climate change • the emerging nations (China, India, Brazil and South Africa) should monitor their own efforts to reduce carbon emissions and report to the UN every two years, with some additional international checks on progress • ‘various approaches’ will be pursued regarding carbon markets and carbon trading. <p><i>UK national scale:</i> The 2006 Climate Change Programme set out strategies to address the issue of climate change and the 2008 Climate Change Bill attempted to put these into practice. The UK government set a target to reduce the output of carbon dioxide by 20% before 2010, cutting emissions by at least 34% by 2020 and 80% by 2050 (below the 1990 baseline). It has also committed to increasing its renewable energy sources, in particular wind energy, and has decided to re-invest in nuclear power to help cut emissions. It also aims to improve the provision of recycling, to expand the production of biofuels and to encourage the overseas purchase of ‘carbon credits’. Building regulations have been tightened to ensure that new homes are carbon efficient.</p> <p>National scale need not be UK.</p> <p>Mark schemes</p> <p>Level 1 (1-4 marks) Basic (mid point 3) Basic statements of the responses at an international/national level such as names of protocols/agreements/bills. Limited depth of understanding of them. No attempt at discussion.</p> <p>Level 2 (5-8 marks) Clear (mid point 6) Clear statements of the responses at an international/national level. Elements of discussion. Both scales must feature for 7/8 marks but may be with a marked imbalance.</p> <p>Level 3 (9-10 marks) Detailed (mid point 9) A fully developed answer, with some recognition of chronology and/or complexity together with detailed discussion which may consider the success or otherwise of the responses at each scale.</p>	
--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

Option 3 – Ecosystems: change and challenge

07	<p>Notes for answers:</p> <p>Issues could be identified from the headings of the stimulus:</p> <ul style="list-style-type: none"> • Safety – there is the balance between safety and maintaining the environment; plants can interfere with the working of the railway, access to it, and its maintenance; but on the other hand Network Rail is keen to appear environmentally sympathetic. • Maintaining an efficient service – there has been a lot of controversy regarding the problem of ‘leaves on the line’. Extensive areas of woodland close to railway lines have been cleared as a result. In some areas some railway routeways have become quite barren. • Weeds – extensive areas of railway sidings, and on the edges of railway lines, are prime locations for the spread and growth of weeds. These can be unsightly, and very difficult to control. They may need the use of powerful chemicals which can spread into gardens and kill other plants/animals. • Birds etc – due to the environmental/conservation element of their work, it may be that some essential maintenance is not completed at the times when it needs to be. Is this appropriate? <p>Mark scheme</p> <p>Level 1 (1-4 marks) Basic (mid point 3) Basic statements of description and/or listing. Limited or basic statements of comment on the issues that may arise. The majority of statements show limited evidence of processing the stimulus material provided.</p> <p>Level 2 (5-7 marks) Clear (mid point 6) Appropriate comment on the issues resulting from the stimulus material. Clear evidence of processing the stimulus material.</p>	[7 marks]
----	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------

08	<p>Notes for answers:</p> <p>The succession on an abandoned industrial site, for example, would occur as follows:</p> <ul style="list-style-type: none"> • Mosses and lichens develop on the bare surfaces. They are able to exist in areas where there is little water, obtaining nutrients by photosynthesis and from the bare concrete beneath them. • Oxford ragwort grows in cracks in the surface which provide sheltered places for seeds to germinate as well as retaining moisture and dust which helps plant to root. • As these lower plants die off, they produce a thicker and more nutrient-rich soil. Taller plants can then become established. One of the most common is rosebay willowherb, which spreads initially by seeds and then by rhizomes which can extend up to 1m a year. • As soil enrichment continues the amount of grass in the vegetation increases. The smaller meadow grasses and bents of earlier stages are replaced by taller species. At this stage the area takes on the appearance of grassland with weeds. One of the common invaders is Japanese knotweed. • As the processes of soil enrichment and competition continue, the taller herbaceous plants are replaced by shrubs and, eventually, trees. From early woody plant colonists (eg. grey willow, birch) to sycamore, laburnum, rowan and hawthorn. Dense thickets of bramble and other such scrub plants develop. These are able to compete because they can grow roots into deeper crevices in the rock. <p>On any site such as this, there will be variations caused by differences in the nature of the surface being colonised. Other surfaces could include:</p> <ul style="list-style-type: none"> • Crushed brick and mortar rubble • Whole and half-bricks • Layers of ash and slag <p>Each of these had distinct successions taking place at different rates, with different species involved.</p> <p>Mark scheme</p> <p>Level 1 (1-4 marks) Basic (mid point 3) Basic statements of explanation. Depth of understanding of succession is limited. References to vegetation species are generic and/or imprecise.</p> <p>Level 2 (5-8 marks) Clear (mid point 6) Clear statements of explanation. There is a clear sense of succession with several stages (more than 2) identified clearly and explained. Understanding is thorough.</p>	[8 marks]
----	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------

09	<p>Notes for answers:</p> <p>An example of a plagioclimax in the UK is heather moorland. Many of the uplands in Britain were once covered by a climax vegetation of deciduous woodland, particularly oak forest. Heather (<i>Calluna vulgaris</i>) would have featured, but only in small amounts. Gradually the forests were removed, for a variety of purposes, and as the soils deteriorated without deciduous vegetation, hardy plants such as heather came to dominate the uplands. Sheep grazing became the major form of agriculture and the sheep prevented the regeneration of climax woodland by destroying young saplings.</p> <p>Many of these uplands have been controlled by managed burning to encourage new heather shoots. Burning has eliminated the less fire-resistant species, leading to the dominance of heather. When heather is burnt, one of the aims is to ensure that as much as possible of the available nutrient fund is conserved in the ecosystem. In many areas, heather is burnt on average every 15 years. If a longer time elapses there is too much woody tissue, the fires burn too hot, and nutrients are lost in the smoke.</p> <p>If the burning was not continued, the heather moorland would degenerate, eventually allowing the entry of trees and a succession to woodland. Much of the present vegetation of the UK is a plagioclimax, largely as a result of clearance from the Roman and Anglo-Saxon periods through to the eleventh century. By this time only about 10% of the original woodland remained in England and Wales.</p> <p>Mark scheme</p> <p>Level 1 (1-4 marks) Basic (mid point 3) Basic statements of human activity and its impact on vegetation. Limited / no attempt to discuss its effect.</p> <p>Level 2 (5-8 marks) Clear (mid point 6) Clear descriptive statements of human activity and its impact, some of which can be clearly attributed to a named or located example. Some sense of discussion is evident.</p> <p>Level 3 (9-10 marks) Detailed (mid point 9) A fully developed answer, with good elaboration and clear detail of the chosen plagioclimax(es). Discussion of effect(s) is explicit.</p>	[10 marks]
----	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------

Section B**Option 4 – World Cities**

10	<p>Notes for answers:</p> <p>Description:</p> <ul style="list-style-type: none"> • Spending in town centres is relatively declining – 10% fall in the time period; Out of town sales are relatively increasing, but not as quickly as might be expected – 4% increase; Neighbourhood sales are fairly constant; Internet sales are increasing – doubled in the time period • E-retail is growing rapidly, and ‘mobile’ sales may add to this. Figures may support e.g. acceleration from 2006 at £10 billion to 2014 - £40 billion - £30 billion increase. <p>Comment:</p> <p>Candidates may seek to explain the above – eg. difficulties of parking in town centres; high rates and rents; free parking at OOTC locations; the rise of on-line shopping causing reductions in both OOTC and town centre locations; government controls on new OOTC locations, may explain relative stagnation in sales.</p> <p>Responses may also discuss consequences – town centres have to re-invent themselves, change their focus; need for better management of such areas; demise of the local store, increase in neighbourhood fast food outlets, even consequential effects on health eg. ‘food deserts’.</p> <p>Some may comment on the usefulness of the resource.</p> <p>Level 1 (1-4 marks) Basic (mid point 3) Basic statements of description. Limited or basic statements of comment. If no description given, then credit one good comment within this level.</p> <p>Level 2 (5-7 marks) Clear (mid point 6) More sophisticated description with appropriate comment. May include effective use of data and manipulation to support answer. May highlight and account for anomalies e.g. neighbourhood data no change.</p>	[7 marks]
-----------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------

11	<p>Notes for answers:</p> <p>Gentrification is the process by which older, often rundown housing areas (usually close to the city centre) become desirable once again and are physically and socially upgraded. Professional groups such as doctors, lawyers and teachers are attracted by the character of the housing – typically Edwardian and Victorian terraces – and its greater accessibility to the CBD. They move in and renovate the property, usually on an individual basis. As a result, other property in the area becomes more sought after and the social composition of the area gradually changes. The purchasing power of the new residents is higher and this leads to an increase or an upgrading in local services such as wine bars, restaurants, delicatessens, boutiques – all attracted by the possibility of catering for the new, wealthier clientele. New residents also tend to have a greater interest in local politics and may actively lobby for improvements to the area in general such as traffic calming measures and the addition of street furniture. There are many examples of gentrified or even ‘super-gentrified’ areas within Britain’s towns and cities. The latter term refers to areas requiring even higher salaries and bonuses such as Islington in the late 1990s. Interestingly, the borough as a whole is still classed as the eighth most deprived local authority area in Britain which demonstrates another aspect of gentrification: the gap in wealth between the original and newer residents, which may itself give rise to friction. Inner city schools for example, fail to see a similar level of improvement as the other services listed as the upwardly mobile newcomers often prefer to send their children to private schools.</p> <p>Mark scheme</p> <p>Level 1 (1-4 marks) Basic (mid point 3) Basic generalised statements of process / effect with limited depth and/or detail. If only process or effect Max L1.</p> <p>Level 2 (5-8 marks) Clear (mid point 6) More specific and/or clear statements of process and effect. May be attributed to a named area, or demonstrate greater depth of understanding and/or knowledge.</p>	[8 marks]
12	<p>Notes for answers:</p> <p>Note:</p> <ol style="list-style-type: none"> 1. Impact of redevelopment on retailing and other services in town and city centres accesses the full range of marks. 2. Impact of redevelopment on retailing and other services in areas outside of town and city centres – Max L1. 3. Where redevelopment outside of the town and city centre impacts upon the town and city centre retailing and other services, this gives full access to the range of marks for the question e.g. impact of OOTSC on the town centre. <p>Despite the negative predictions of the previous section, some urban centres do continue to flourish. In some cases, the urban centres has moved slightly in one or more directions; in other cases it has re-invented itself with new indoor shopping areas, themed areas (eg. cultural</p>	[10 marks]

	<p>quarters) or malls. A number of strategies are being devised to help reverse the decline of city centres, including:</p> <ul style="list-style-type: none"> • the establishment of business and marketing management teams to coordinate overall management of urban centres and run special events • the construction of all-weather shopping malls that are air-conditioned in the summer and heated in the winter and which often have integral low-cost parking • the encouragement of specialist areas, such as attractive open street markets • the improvement of public transport links to the heart of the urban centres, including rapid transit systems, park-and-ride schemes and shopper buses • the extensive use of CCTV and emergency alarm systems to reduce crime and calm the fears of the public, particularly women • the organisation of special shopping events such as Christmas fairs, late-night shopping and Sunday shopping – sometimes referred to as ‘the 24-hour city’ • conservation schemes, such as the refurbishment of historic buildings in heritage cities like Chester, York, Bath and Cambridge, to attract shoppers and tourists • encouraging a wider range of leisure facilities, including café bars, restaurants, music venues (such as the ‘Arenas’ in many city centres), cinemas and theatres that people visit in the evening • promoting street entertainment, such as Covent Garden in London • developing nightlife, eg. in Manchester and Leeds (there are negative issues associated with this, including the high level of policing that is necessary) • developing flagship attractions, for example the photographic museum in Bradford; the Hepworth Gallery in Wakefield • constructing new offices, apartments, hotels and conference centres to raise the status of the urban centres for business and to encourage tourists to remain near the city centre • encouraging residential activities in city centres: flats to rent above shops, redeveloping old buildings (a form of gentrification) or building new up-market apartments (re-urbanisation). <p>Mark scheme</p> <p>Level 1 (1-4 marks) Basic (mid point 3) Basic statements of urban centre redevelopment schemes/policies which could apply to any area of the country. No specific detail provided, nor any attempt to assess.</p> <p>Level 2 (5-8 marks) Clear (mid point 6) Clear descriptive statements of urban centre redevelopment schemes/policies some of which can be clearly attributed to a named example. Assessment is tentative and implicit.</p> <p>Level 3 (9-10 marks) Detailed (mid point 9) A fully developed answer, with good elaboration and detail of the chosen urban centre redevelopment schemes/policies. Assessment is explicit.</p>	
--	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

Option 5 – Development and Globalisation

13	<p>Notes for answers:</p> <p>Description: On each measure (except GDP) China is experiencing more positive economic conditions than the USA. On trade, China's exports are worth more than its imports (surplus of \$0.16 trillion), compared to the trade deficit of the USA (at \$-0.73 trillion). Similarly export trade between the USA and China is in surplus for China at \$295.4 billion. The US economy is still much larger than China's with a GDP of 15.1 trillion dollars, \$7.8 trillion more than China's.</p> <p>GDP growth rate is much faster in China with figures between 8.2% and 10.4% over the period. USA growth has not only been much lower, it has also experienced recession with two years of negative growth in 2008 and 2009. The range is much greater at 5.6% suggesting a fluctuating economy.</p> <p>Comment: Allow any comment which is reasonably derived from the data e.g:</p> <p>All of the data points towards the suggestion that China is 'catching up' the USA in economic terms. Responses may support comment using their own data and understanding of the growth of China in recent years. China is exporting more than the USA but relies upon the USA for a greater share of its imports than vice versa. So whilst its economy is growing faster than the USA, a significant factor in the reason for growth is American demand for its export produce. Some may consider over-dependence upon the American export market as negative of the Chinese economic export figures. This may lead into further comment about the need for China to develop its own strong domestic market for its produce.</p> <p>More sophisticated comment is likely to see the link between GDP growth and overall GDP. Some may suggest that it will not be too long before China overtakes the USA in GDP terms despite the large gap in 2011. Some may bring in their own knowledge and suggest that this will occur around 2020 though estimates do vary.</p> <p>Mark scheme</p> <p>Level 1 (1-4 marks) Basic (mid point 3) Basic statements of description with limited use of data to support response. Limited or basic statements of comment.</p> <p>Level 2 (5-7 marks) Clear (mid point 6) More sophisticated description with effective use of data to support. Appropriate clear comment derived from the data.</p>	[7 marks]
-----------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------

14	<p>Notes for answers:</p> <p>India's software and ICT services have been in the forefront of its service sector growth. The country has a large number (2.5 million) of highly qualified professionals whose skills are in demand worldwide, particularly in the English speaking world, and the ICT sector has benefited from the filtering-down of business from Europe and North America. Companies in those areas, which once outsourced their ICT requirements to local firms, have increasingly used Indian companies. The country has also gained from being able to offer a wide range of office skills that developed world companies are only too willing to outsource to this lower wage economy. Some journalists have called India 'the back office' of the world. India is employing increasing numbers in call-centre operations, western companies saving 40-50% of their costs by switching to the country. Amongst companies operating in this way are British Airways and American Express. Other aspects of the service sector that have grown in recent years include the media, advertising, personal financial services, entertainment and tourism – all linked to rising levels of personal income. The 'new' middle class of India is thought to be around 300 million – a huge potential purchasing power for consumer industries. Some parts of India (Mumbai, Delhi, Bangalore) have excellent infrastructure – power, transport, banking, and legal systems – which all encourage investment.</p> <p>Say may consider the usefulness of the resource as valid comment.</p> <p>Mark scheme: Level 1 (1-4 marks) (mid point 3) Generalised statements of description of impacts which are either basic, simplistic or lacking in a sense of place for India.</p> <p>Level 2 (5-8 marks) (mid point 6) Specific and clear explanation of impacts that clearly apply to India. As more such statements are made, the answer moves up the level.</p>	[8 marks]
15	<p>Notes for answers:</p> <p>Trade has been seen as a means to allow more revenue to flow into a country, promoting increased wealth and living standards. This is partly depending on three factors:</p> <ul style="list-style-type: none"> • the adoption of Western-style capitalism • economic growth 'trickling down', enabling new industry to be established • promotion of free trade, where markets are as open as possible. <p>Some economists doubt that poorer countries with a multitude of problems such as HIV/AIDS, war and drought can ever become developed through trade and economic growth. These arguments are based upon the following:</p> <ul style="list-style-type: none"> • LDCs cannot be competitive in world markets because of the great difference in wealth between them and developed countries • Many poorer countries depend upon agricultural exports, the price 	[10 marks]

	<p>of which has been falling. Also, farmers in richer countries are often protected through schemes such as the EU Common Agricultural Policy.</p> <ul style="list-style-type: none"> • Wealth generated by trade does not always ‘trickle down’ to the majority of the population and the gap between rich and poor in developing countries is growing. • The debts of many poorer countries have put them in a difficult position. To receive help, they have had to accept suggestions from bodies such as the IMF and World Bank which has often meant cuts in public spending, particularly on health and education. <p>Aid can be supplied through one of three systems: bilateral – one government gives to another; multilateral – governments give to international organisations (World Bank, UNESCO), which in turn give to poorer countries; non-governmental organisations (NGOs) – many of these are charities, such as Oxfam, which raise money and distribute it to the people who need it most.</p> <p>There are several ways in which aid can be delivered. It does not have to be in the form of money, it could be goods or technical assistance. Distribution can be as:</p> <ul style="list-style-type: none"> • Short-term aid – usually following an emergency (hurricane, flood, tsunami) • Long-term development projects • Top-down aid – the operation is directed by a responsible body from above, such as in large-scale irrigation and HEP projects • Bottom-up schemes – these are ‘grassroots’ initiatives often funded by NGOs working closely with local people <p>Critics of aid as a means towards development point out that:</p> <ul style="list-style-type: none"> • aid does not always reach those who need it most and is not always used effectively because of corruption • with a lack of basic infrastructure, it is often difficult to use aid effectively • aid dependency can be created • aid can often come with strings attached – pressures from the donor country. <p>Mark scheme Level 1 (1-4 marks) Basic (mid point 3) Basic and generalised statements of impacts which could apply to any area. No specific detail provided. No attempt to assess.</p> <p>Level 2 (5-8 marks) Clear (mid point 6) Specific and clear statements of impacts which may be clearly attributed to named areas/countries. Both elements addressed but with some imbalance. Some assessment must be clearly recognisable for 7/8 marks. Awareness of relative impacts emerges.</p>	
--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

	<p>Level 3 (9-10 marks) Detailed (mid point 9) A fully developed answer, with good elaboration of a range of specific impacts. Both elements are addressed with some balance. Explicit assessment of relative impact and detailed knowledge.</p>	
--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

Option 6 – Contemporary conflicts and challenges

16	<p>Notes for answers:</p> <p>Description: The distribution of forced displaced people is very much concentrated in certain parts of the world:</p> <ul style="list-style-type: none"> • Central/sub-Saharan Africa, with a particular concentration in the Horn of Africa • Western Asia – Turkey/Iraq/Israel and Palestine; and southern Russia fringe states • SW Asia – Afghanistan/Pakistan/Yemen • SE Asia – Burma/Vietnam • Others: the Balkans and Colombia <p>In terms of the sheer numbers involved, central African countries probably have the major problem of any region.</p> <p>Comment: Many of the above are associated with international wars (Congo, Iraq, Afghanistan); equally there is a correlation with civil wars (Sudan) and other forms of internal strife (eg. Somalia). In the Horn of Africa there is the added complication from drought and famine which have caused many people to move from their homes to relief camps. Some concentrations have been long-standing and owe their origin to historical conflicts (the Balkans, Sri Lanka). Area with highest numbers tend to correlate with poverty and comment may explore reasons for movement from these areas or within these areas.</p> <p>Appropriate comment may consider the usefulness of the resource in displaying this data.</p> <p>Mark scheme Level 1 (1-4 marks) Basic (mid point 3) Basic statements of description. Limited or basic statements of comment.</p> <p>Level 2 (5-7 marks) Clear (mid point 6) More sophisticated description with appropriate comment.</p>	[7 marks]
-----------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------

17	<p>Notes for answers:</p> <p>The United Nations Millennium Development Goals (MDGs) have established 2015 as the target date for achieving most of their aims, with 1990 generally used as a baseline. The eight goals are aimed at the global <i>causes</i> of poverty. They are to:</p> <ul style="list-style-type: none"> • eradicate extreme poverty and hunger • achieve universal primary education • promote gender equality and empower women • reduce child mortality • improve maternal health • combat HIV/AIDS, malaria and other diseases • ensure environmental sustainability • develop a global partnership for development. <p>Candidates may want to describe these in general terms, or identify one and describe it in more detail. Alternatively, they could describe the work of an NGO (such as Oxfam) in any area of strategy. For example:</p> <ul style="list-style-type: none"> • Oxfam is working directly with people affected by HIV and AIDS. In Malawi, Oxfam trains and supports home-based carers: local volunteers who, with Oxfam supplies, support the ill, elderly and orphaned in their communities. • In India, Oxfam’s HIV/AIDS programme aims to increase access to prevention, treatment, care, and support for those infected and affected, as well as raising public awareness about the disease. • In Sri Lanka, south Sudan and Liberia, Oxfam supports the rehabilitation of community health centres and the development of basic services, including medicine supplies. <p>Mark scheme</p> <p>Level 1 (1-4 marks) Basic (mid point 3) Statements of general features of the work of international agencies, lacking a sense of clear strategy and/or area(s) where it is being put in place. No depth of understanding.</p> <p>Level 2 (5-8 marks) Clear (mid point 6) Clear statements of the work of international agencies. There is a clear sense of strategy, and purpose, and possibly location. Depth is apparent.</p>	[8 marks]
18	<p>Notes for answers:</p> <p>For example: the wars in the Congo region of Africa led to mass forced migrations, a complete collapse of already inadequate health systems and fatal food shortages. Although a formal peace accord was signed between warring factions in December 2002, several residual conflicts continue to this day. These remain a major cause of mortality amongst local populations. As a result of conflict, DR Congo is unlikely to meet its MDG targets. Instead, the nation is one of a handful of African states where progress has been lost rather than made in recent years. For instance:</p> <ul style="list-style-type: none"> • Mortality rates – DR Congo’s national crude death rate of 26 	[10 marks]

	<p>deaths per 1000 people per year is 50% higher than the average rate for sub-Saharan Africa. This rate is unchanged since 2004. The majority of deaths have been due to infectious diseases and malnutrition. Increased rates of disease are linked with disturbances caused by conflict, including disruption of health services, poor food security, deterioration of the nation's infrastructure and large-scale population displacement. Children are particularly susceptible to these easily preventable conditions. No progress has been made since 1990 towards the MDG target for improving under-five mortality rate. The percentage of the population with access to safe drinking water has actually fallen over the same time period.</p> <ul style="list-style-type: none"> • Gender equality – While gender equality is sought by the MDGs, DR Congo is a place where the majority of women have experienced some kind of sexual assault. Rape has been used as a weapon of war. • Primary schooling – Increased primary schooling is a very important MDG – it links with the pressing need to develop the human resources of the world's poorest countries. But, in DR Congo, tens of thousands of children were forced to become soldiers – some as young as ten were forced to murder adults. Many have suffered trauma as a result. Combined with interrupted schooling, they may have difficulty finding anything other than menial work in the future. International investors may also be deterred from bringing jobs to DR Congo if they feel that too many young people are psychologically scarred and lack workplace skills. <p>Mark scheme</p> <p>Level 1 (1-4 marks) Basic (mid point 3) Basic statements of issue, which are generalised and non-specific to the identified conflict. No attempt to discuss.</p> <p>Level 2 (5-8 marks) Clear (mid point 6) Specific and clear statements of issues which are clearly related to the identified conflict. Some discussion must be clearly recognisable for 7/8 marks.</p> <p>Level 3 (9-10 marks) Detailed (mid point 9) A fully developed answer, with clear and appropriate detail. Recognition of the complexity of issues which may involve the change issue over time. Explicit discussion of issues.</p>	
--	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

Section C - Mark scheme for the essay questions

Assessment criteria	Level 1 1-10 (midpoint 6)	Level 2 11-20 (midpoint 16)	Level 3 21-30 (midpoint 26)	Level 4 31-40 (midpoint 36)
Knowledge of content, ideas and concepts	Basic grasp of concepts and ideas; points lack development or depth.	The answer is relevant and accurate. Reasonable knowledge. Imbalanced theories	Sound and frequent evidence of thorough, detailed and accurate knowledge	Strong evidence of thorough, detailed and accurate knowledge
Critical understanding of the above	Incomplete, basic.	Reasonable critical understanding of concepts and principles with some use of specialist vocabulary.	Sound and frequent evidence of critical understanding of concepts and principles, and of specialist vocabulary.	Strong evidence of critical understanding of concepts and principles and of specialist vocabulary.
Use of examples/case studies to support argument	Superficial	Examples show imbalances and/or lack detail and depth	Examples are developed, balanced and support the argument	Examples are well developed and integrated.
Maps/Diagrams (when used)	None	Ineffective	Effective	Fully integrated
Evidence of synopticity: Connections between different aspects of the subject 'Thinking like a geographer'	No evidence	Limited. Some ability to identify, interpret and synthesise some of the material. Limited ability to understand the roles of values, attitudes and decision-making processes.	Strong Some ability to identify, interpret and synthesise a range of material. Some ability to understand the roles of values, attitudes and decision-making processes.	Full There is a high level of insight, and an ability to identify, interpret and synthesise a wide range of material with creativity. Evidence of maturity in understanding the role of values, attitudes and decision-making processes.
Quality of argument – the degree to which an argument is constructed, developed and concluded	Language is basic; arguments are partial, over simplified and lacking clarity. Little or no sense of focus of task.	Arguments are not fully developed nor expressed clearly, and the organisation of ideas is simple and shows imbalances. Some sense of focus of task.	Explanations, arguments and assessments or evaluations are accurate, direct, logical, purposeful, expressed with clarity and generally balanced. Clear sense of focus of task.	Explanations, arguments and assessments or evaluations are direct, focused, logical, perceptive, mature, purposeful, and are expressed coherently and confidently, and show both balance and flair.

19	<p>Appropriate content for a response to this question might include:</p> <ul style="list-style-type: none">• the concept of a hazard• knowledge and understanding of volcanic events studied as hazards and the extent to which they impact upon human societies and economies• areas at varying risk related to the income/economic development of the people living in the areas affected• variations in the capacity to prevent, predict, prepare for, adapt to, or manage volcanic events and their impacts• variations in the impacts of volcanic events on different groups of people with the same area/region• case study material/exemplars to support the argument. <p>Synopticity emerges with some of the following:</p> <ul style="list-style-type: none">• a critical understanding of the processes that produce volcanic events and the context in which they are produced• a critical understanding of the varying impacts of volcanic events – such as those based on magnitude, speed of onset, duration, areal extent and frequency• an understanding of the vulnerability of different populations to these events• an understanding of the capacity for resilience to these events• a critical understanding of the meaning of ‘catastrophe’• a critical understanding of the vulnerability of different regions, particularly an understanding of the differences between richer and poorer areas and the contrast between urban and rural environments• an understanding of the importance of varying timescales and spatial variations• an understanding of the capacity and willingness of people to cope with these hazards. <p>The question requires a discursive approach and the response should come to a view. Any conclusion can be credited as long as it is measured and reasonable, and related to the content of the answer.</p>	[40 marks]
-----------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------

20	<p>Appropriate content for a response to this question might include:</p> <ul style="list-style-type: none"> • the concept of a hazard • knowledge and understanding of storm events studied as hazards and the extent to which they impact upon human societies and economies • areas at varying risk related to the income/economic development of the people living in the areas affected • variations in the capacity to predict, prepare for, adapt to, or manage storm events and their impacts • variations in the impacts of storm events on different groups of people with the same area/region • case study material/exemplars to support the argument. <p>Synopticity emerges with some of the following:</p> <ul style="list-style-type: none"> • a critical understanding of the processes that produce storm events and the context in which they are produced • a critical understanding of the varying impacts of storm events – such as those based on magnitude, duration, areal extent and frequency • an understanding of the vulnerability of different populations to these events • an understanding of the capacity for resilience to these events • a critical understanding of the meaning of ‘catastrophe’ • a critical understanding of the vulnerability of different regions, particularly an understanding of the differences between richer and poorer areas and the contrast between urban and rural environments • an understanding of the importance of varying timescales and spatial variations • an understanding of the capacity and willingness of people to cope with these hazards. <p>The question requires a discursive approach and the response should come to a view. Any conclusion can be credited as long as it is measured and reasonable, and related to the content of the answer.</p>	[40 marks]
21	<p>Appropriate content for a response to this question might include reference to the following:</p> <ul style="list-style-type: none"> • an understanding of the relationship between human activity, biodiversity and sustainability • a clear understanding of each of the concepts of conservation and exploitation • an understanding that many fragile environments need to be managed in order to conserve them • an understanding that fragile environments in developing countries may pose further management problems due to levels of finance, technical expertise etc. • human activity, either conservation or exploitation have both positive and negative consequences • references to examples and/or case studies of environmental 	[40 marks]

	<p>management schemes at varying levels of development.</p> <p>Synopticity emerges with some of the following:</p> <ul style="list-style-type: none">• evidence in the breadth/depth of case-study material• detailed critical understanding of the underlying problems faced when trying to manage fragile environments in some more remote/fragmented locations• recognition of the varying capacity to manage fragile environments with a comparison made between areas along the development continuum• recognition of variation in the attitudes of different groups or people in different parts of the world, with varying economic and political systems and their attitude towards the management of fragile environments• recognition that changes to ecosystems can impact at a variety of scales – local, national and global. <p>The question requires a discursive approach and the response should come to a view. Any conclusion is valid and can be credited as long as it is measured and reasonable, and related to the content of the answer.</p>	
--	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

22	<p>Appropriate content for a response to this question might include:</p> <ul style="list-style-type: none"> • an understanding of the causes of urban decline • an understanding of the consequences of urban decline • an understanding of the purposes of urban regeneration • an understanding of the variety of ways and means by which urban regeneration has been attempted • examples and/or case studies of areas of both urban decline and urban regeneration • an understanding of the means by which the success of regeneration can be identified and measured • Residential, retail, leisure, commercial and industrial redevelopment strategies all constitute valid approaches. <p>Synopticity emerges with some of the following:</p> <ul style="list-style-type: none"> • evidence in the breadth/depth of case-study material • detailed critical understanding of the issues involved • detailed critical understanding of the management of the issues involved • a recognition of the importance of values and attitudes, and of the role of decision makers • a recognition of how the impact of urban decline/regeneration may vary over time and space • detailed critical understanding of whether ‘improvement’ has been achieved <p>The question requires an evaluative approach and the response should come to a view. Any conclusion can be credited as long as it is reasonable and related to the preceding content and argument.</p>	[40 marks]
23	<p>Appropriate content for a response to this question might include:</p> <ul style="list-style-type: none"> • knowledge and understanding of the social and economic groupings in the world • an understanding of their purposes/reasons for their existence • an understanding of the consequences of such groupings • an understanding of how the groupings relate to the development continuum • knowledge and understanding of well-known groupings such as the EU • further examples and/or case studies of other social/economic groupings in the world • Assessment of the impact of groupings of nations, both positive and negative. <p>Synopticity emerges with some of the following:</p> <ul style="list-style-type: none"> • evidence in the breadth/depth of case-study material • detailed critical understanding of characteristics of the groupings • detailed critical understanding of the consequences of groupings • detailed critical understanding of the issues involved • understanding in the context of, and impact of, varying timescales including more contemporary issues affecting global groupings – 	[40 marks]

	<p>eg. the financial crisis of recent years</p> <ul style="list-style-type: none"> • awareness of the complexity of this issue, and of the importance of the role of decision makers • awareness that groupings may have unintended consequences. <p>The question requires an evaluative approach and the response should come to a view. Any conclusion can be credited as long as it is measured and reasonable, and related to the preceding content and argument.</p>	
24	<p>Appropriate content for a response to this question might include:</p> <ul style="list-style-type: none"> • understanding of the basis and/or reasons for conflict/s • understanding of the attitudes of different groups of people (participants) to conflict/s • knowledge and understanding of the means by which conflict/s can be resolved • recognition and understanding of the ‘winners’ and ‘losers’ when conflict is resolved • detailed reference to the chosen case study or case studies of conflict/s <p>Synopticity emerges from some of the following:</p> <ul style="list-style-type: none"> • evidence in the depth of the chosen case study material • detailed critical understanding of the causes, and consequences of, human attitudes and proposals • recognition of variation in the basis of attitudes within groups who may perceive they will lose or benefit from the outcome of the conflict • recognition that these attitudes may change over time • recognition that the perception of ‘winners’ and ‘losers’ may change over time, or possibly space. <p>This question clearly requires an discursive approach and the response should try to come to a view with regard to the statement. This will depend on how far the conflict has progressed towards its resolution. Any conclusion is valid and can be credited as long as it is measured and reasonable, and related to the content of the argument.</p>	[40 marks]