

GCE Geography

OCR Advanced Subsidiary GCE in Geography H083

OCR Advanced GCE in Geography H483

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specification

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1 About these Qualifications

This booklet contains OCR's Advanced Subsidiary GCE and Advanced GCE specifications in Geography for teaching from September 2008.

Specification Rationale

- The specification is designed to highlight the main issues and concepts that young adults are likely to encounter in their current and future lives, such that they can make better-informed decisions and be sensitive to a wide range of viewpoints and challenges.
- The specification is issue- and concept-based and enables centres to address topics which suit their locality or offer suitable practical experience such as fieldwork.
- Unit F763: *Global Issues*, one of the A2 units, builds on AS content but the focus broadens to a global scale. That is, the AS units provide the basic concepts of cause–effect, connections, and interrelationships; then Unit F763 combines many of the elements of the AS content and further develops and extends these concepts in the context of wider global issues. For example, the study of the A2 topic *Environmental issues* requires a background in, and solid understanding of, AS-level physical (F761) and human geography (F762). This grounding enables an evaluation to be made of the most effective ways of reducing impact on the community and environment. Similarly, the A2 topic *Economic issues* cannot be fully understood without an understanding of the interconnection of physical and human geography covered at AS Level.
- The other A2 unit, *Geographical Skills* (F764), seeks to bring together and extend the use of tools and processes of geographical research that candidates have come across in both their AS and A2 courses.
- This specification requires an in-depth study of the topics in each of the four units (F761 to F764), to ensure that all candidates cover a wide range of concepts at a wide range of scales and locations.

These specifications:

- explore the principles, concepts and processes that help explain geographical phenomena and landscapes;
- encourage spatial awareness and sense of place;
- maintain the balance between physical geography and human geography;
- reduce repetition of topics covered at GCSE/KS4, and provide continuity and progression in geographical understanding;
- enable topics to be explored in depth;
- ensure topics have relevance to the modern world and young peoples' lives;
- ensure individual research/investigation (including fieldwork) retains a significant position as a unique feature of geography;

- maintain a link with previous OCR specifications so as to allow use of existing teaching and learning resources/approaches;
- ensure assessment is progressive and differentiated, moving from data response to fully extended writing.

1.1 The Two-Unit AS

The Advanced Subsidiary GCE is both a 'stand-alone' qualification and the first half of the corresponding Advanced GCE. The AS GCE is assessed at a standard appropriate for candidates who have completed the first year of study (both in terms of teaching time and content) of the corresponding two-year Advanced GCE course, ie between GCSE and Advanced GCE.

The AS GCE (from September 2008) is made up of **two** mandatory units which are externally assessed and form 50% of the corresponding four-unit Advanced GCE.

This AS specification enables candidates to:

- develop knowledge and understanding of selected physical, human and environmental processes that underpin key geographical concepts;
- develop a knowledge and understanding of the key concepts of place, space, diversity, interdependence, people–environment interaction, the processes associated with these, and change over time;
- study at a range of scales, from the local to the global, both physical and human components and to understand the importance of scale as a geographical idea;
- use a range of skills and techniques, including the use of maps and images at different scales necessary for geographical study;
- carry out research and out-of-classroom work, including fieldwork, as appropriate to the topics selected;
- use modern information technologies, including geographical information systems, as appropriate to the content;
- develop an understanding of the application and relevance of geography.

This AS specification also:

- enables the physical and human components of the course to follow parallel paths in structure and assessment;
- enables topics previously included at GCSE to be approached from a new perspective as well as including new topics, for example:
 - in the physical component, the topics of *Coastal environments* and *River environments* provide some continuity from the previous specification, while *Hot arid / semi-arid environments* and *Cold environments* provide something new;
 - in the human component, the topics of *Managing urban change*, *Managing rural change*

and *The growth of tourism* provide some continuity with the previous specification, while *The energy issue* provides something new;

- recognises fieldwork as an essential component of geography, hence the inclusion of *Coastal environments* and *River environments* in the physical component and *Managing urban change* and *Managing rural change* in the human component;
- requires candidates to study the full range of topics.

1.2 The Four-Unit Advanced GCE

The Advanced GCE (from September 2008) is made up of **two** mandatory units at AS and **two** further units at A2. Both A2 units are externally assessed, one of which is partly based on fieldwork.

In addition, this Advanced GCE specification enables candidates to:

- undertake individual research/investigative work, including fieldwork;
- extend their understanding of geographical ideas, concepts and processes;
- identify and analyse the connections between the different aspects of geography;
- analyse and synthesise geographical information in a variety of forms and from a range of sources;
- consider new ideas and developments about the changing nature of geography in the 21st century;
- critically reflect on, and evaluate, the potential and limitations of approaches and methods used both in and outside the classroom.

Also this Advanced GCE specification:

- emphasises global issues of current and future relevance;
- retains the principle of options;
- provides a balance between 'environmental' and 'economic/social issues', which is reflected in options from **two** distinct sections.

1.3 Qualification Titles and Levels

These qualifications are shown on a certificate as:

- OCR Advanced Subsidiary GCE in Geography.
- OCR Advanced GCE in Geography.

Both qualifications are Level 3 in the National Qualification Framework (NQF).

1.4 Aims

The aims of the GCE specification are to encourage candidates to:

- develop and apply their understanding of geographical concepts and processes to understand and interpret our changing world;
- develop their awareness of the complexity of interactions within and between societies, economies, cultures and environments at scales from local to global;
- develop as global citizens who recognise the challenges of sustainability and the implications for their own and others' lives;
- develop critical and reflective thinking and appreciate the importance of attitudes and values, in decision-making;
- become adept in the use and application of skills and new technologies through their geographical studies both in and outside the classroom;
- be inspired by the world around them, and gain enjoyment and satisfaction from their geographical studies and understand their relevance.

1.5 Prior Learning/Attainment

No prior knowledge of the subject is required. The specifications build on, but do not depend on, the knowledge, understanding and skills specified for GCSE Geography. It is recommended that candidates have attained communication and literacy skills at a level equivalent to GCSE Grade C in English.

2 Summary of Content

2.1 AS Units

Unit F761: *Managing Physical Environments*

- River environments
- Coastal environments
- Cold environments
- Hot arid / semi-arid environments

Unit F762: *Managing Change in Human Environments*

- Managing urban change
 - Managing rural change
 - The energy issue
 - The growth of tourism
-

2.2 A2 Units

Unit F763: *Global Issues*

- Environmental issues:
 - Earth hazards (Option A1)
 - Ecosystems and environments under threat (Option A2)
 - Climatic hazards (Option A3)
- Economic issues:
 - Population and resources (Option B1)
 - Globalisation (Option B2)
 - Development and inequalities (Option B3)

Unit F764: *Geographical Skills*

- Geographical skills:
 - Identifying a suitable geographical question or hypothesis for investigation
 - Developing a plan and strategy for conducting the investigation
 - Collecting and recording appropriate data
 - Presenting the data collected in appropriate forms
 - Analysing and interpreting the data
-

2.3 Development of Skills at AS and A2

- Candidates at AS are required to develop fieldwork skills in the context of Human and Physical Geography which relate directly to their course of study.
- At AS, candidates are required to become proficient in a range of research and investigative skills, including:
 - the use of modern technologies (such as electronic image and map interpretation)
 - statistical analysis
 - presentational techniques.
- Candidates at A2 extend their research/investigative work in one chosen study based on the content of Unit F763 *Global Issues*.
- Both A2 units provide an opportunity to acquire new skills, such as more advanced statistical and analytical strategies, as well as consolidating and extending those from AS. At A2, candidates will be assessed on all skills covered by AS and A2 units.
- AS skills enable candidates to seek evidence to support explanations and understanding. These skills are further developed and extended at A2 to enable candidates to use individual application, interpretation, evaluation and informed judgements with a degree of confidence.

3 Unit Content

Specification content is set out in a structure designed to provide a learning agenda for students and teachers to follow. Firstly, **questions for investigation** are stated which provide the broad framework for the specification. These in turn lead to **key ideas**, which illustrate **some** of the approaches to answering the question for investigation. These will form the basis of the various assessment tasks. **Content** gives a **minimum** list of topics/concepts that can be expected to be studied in the time available. These topics/concepts are not exclusive and centres are encouraged to go beyond this minimum to enable candidates to better meet the needs of 'stretch and challenge'.

3.1 AS Unit F761: *Managing Physical Environments*

The aims of this unit are for candidates to develop an understanding of:

- the physical processes and factors that produce the diverse features of the physical environment over space and time;
- the dynamic nature of environments that change over time and place;
- place and the diverse nature of its interdependent connections;
- how the physical environment is managed in a sustainable way;
- the use of modern technologies such as GIS, remote sensing etc. to understand the complexities of the physical environment;
- the interdependence of physical environments and the dynamic interaction between people and the environment;
- the impact of the physical environment upon human activity;
- how human activities have affected physical systems and the consequences.

The key ideas stated in the Specification identify the concepts underpinning the unit content.

Candidates should study *River environments* AND *Coastal environments* as well as *Cold environments* AND *Hot arid / semi-arid environments*.

There is an expectation that an investigation or fieldwork will be carried out to research the form and cause of river features or marine features.

River environments

<i>Questions for Investigation</i>	<i>Key Ideas</i>	<i>Content</i>
What processes and factors are responsible for distinctive fluvial landforms?	<p>Slope processes and channel processes give rise to distinctive fluvial landforms.</p> <p>These processes are influenced by a range of factors which vary from place to place.</p>	<p>The study of a river basin or river basins, including practical research and out-of-classroom work – fieldwork, to illustrate:</p> <ul style="list-style-type: none"> • a range of features associated with erosion in river systems; • a range of features associated with deposition in river systems; • the factors affecting the development of these features, including rock type and structure, slope, climate and sea-level change; • the processes responsible for these features, including weathering, mass movement, erosion and deposition.
In what ways can river basins be a multi-use resource?	<p>River landscapes provide opportunities for a number of human activities, including:</p> <ul style="list-style-type: none"> • industrial development; • transportation; • residential development; • energy development; • water supply; • recreation and leisure; • conservation. 	<p>The study of at least two contrasting river environments to illustrate:</p> <ul style="list-style-type: none"> • the range of activities found in these areas; • the reasons for the growth and development of these activities; • that differing land-uses may conflict in these areas.
What issues can arise from the development of river basins?	<p>The pressure to develop river basins can make them increasingly vulnerable to flooding.</p>	<p>The study of a river basin or basins, including practical research and out-of-classroom work – fieldwork, to illustrate:</p> <ul style="list-style-type: none"> • why some river basins are naturally vulnerable to flooding; • how development can increase the risk of flooding; • the social, economic and environmental impacts of flooding.

What are the management challenges associated with the development of river landscapes?

Successful management requires an understanding of physical processes.

Managing river landscapes is often about balancing socio-economic and environmental needs. This requires detailed planning and management.

The study of at least **two** contrasting river basins to illustrate the varying need for planning and management in resolving development and flood risk issues, and possible land-use conflicts in river basins.

Key Concepts:

- River landscapes and their features show spatial variation
- River landscapes evolve over time
- River landscapes result from a variety of factors
- River landscapes consist of a variety of interdependent and interconnected activities and processes
- River basins have a variety of uses
- The development of river basins result in opportunities and challenges

Associated Skills:

- Fieldwork to investigate river processes and landforms
 - Analysis of a variety of types of image
 - Map work at a variety of scales, eg identifying stream networks and analysing drainage density patterns
 - Statistical analysis, including charts and graphs
 - Use of GIS and other modern technology, eg in forecasting stream flow and analysing present or future flood risk
-

Coastal environments

<i>Questions for Investigation</i>	<i>Key Ideas</i>	<i>Content</i>
What processes and factors are responsible for distinctive coastal landforms?	<p>Weathering, erosion, transportation and deposition give rise to distinctive types of coastal landform.</p> <p>These processes are influenced by a range of factors, which vary from place to place.</p>	<p>The study of an extended stretch of coastline or coastlines, including practical research and out-of-classroom work – fieldwork, to illustrate:</p> <ul style="list-style-type: none"> • a range of features associated with coastal erosion; • a range of features associated with coastal deposition; • the processes responsible for these features, including wave action and sub-aerial processes; • the factors affecting the development of these features including rock type and structure, aspect and sea-level change.
How can coasts be protected from the effects of natural processes?	<p>There are a number of ways that coastal areas can be protected, ranging from hard engineering to managed retreat.</p>	<p>The study of an extended stretch of coastline or coastlines, including practical research and out-of-classroom work – fieldwork, to illustrate:</p> <ul style="list-style-type: none"> • the reasons why some coastal areas need to be protected; • the different methods of coastal protection, including hard and soft engineering and managed retreat; • the planning, management and environmental issues associated with different coastal protection methods.
In what ways can coastal areas be a valuable economic and environmental resource?	<p>Coastal areas provide opportunities for a number of human activities, including:</p> <ul style="list-style-type: none"> • industrial development; • transportation; • residential development; • energy development; • recreation and leisure; • conservation. 	<p>The study of at least two contrasting coastal environments to illustrate:</p> <ul style="list-style-type: none"> • the variety of activities found in coastal areas; • the reasons for the growth and development of these different activities; • that conflicts may result from the growth and development of these activities.

What are the management challenges associated with the development of coastal areas?

Successful management requires an understanding of physical processes.

Managing coastal areas is often about balancing socio-economic and environmental needs. This requires detailed planning and management.

The study of at least **two** contrasting examples of coastal areas to illustrate the need for planning and management in resolving development issues and conflicts in such areas.

Key Concepts:

- Coastal landscapes vary depending on factors such as location, time and space
 - Coastal landscapes result from a variety of often interrelated factors
 - Coastal landscapes consist of a variety of interdependent and interconnected activities and processes
 - Coastal areas have a variety of uses which change with time and location
 - The development of coastlines results in opportunities and challenges
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Associated Skills:

- Fieldwork to investigate coastal processes and landforms
 - Analysis of a variety of types of image, eg coastal land-use patterns and development over time
 - Map work at a variety of scales, eg the impact of coastal defence systems
 - Statistical analysis
 - Use of GIS and other modern technology, eg in measuring movement direction and volume of sediment cells in various coastal locations
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Cold environments

<i>Questions for Investigation</i>	<i>Key Ideas</i>	<i>Content</i>
What processes and factors give cold environments their distinctive characteristics?	<p>The distinctive characteristics of cold environments are a result of climatic and geomorphological processes.</p> <p>These processes are influenced by a range of factors, which vary from place to place.</p>	<p>The study of a cold environment or cold environments to illustrate:</p> <ul style="list-style-type: none"> the impact of climate and weathering on the physical landscape; the way that ice and water shape the landscape to produce distinctive landforms, including cirques, arêtes, U-shaped valleys, waterfalls, lakes, moraines and outwash plains.
Why are cold environments considered to be 'fragile'?	<p>Climatic extremes lead to finely balanced ecosystems which can be easily damaged.</p> <p>Both flora and fauna can suffer as a result of change, and regeneration is difficult in the harsh conditions.</p>	<p>The study of one cold environment to illustrate:</p> <ul style="list-style-type: none"> the impacts of climate on the nature of the ecosystem; how both physical and human factors make the environment ecologically vulnerable.
What are the issues associated with the development of cold environments?	<p>Cold environments provide opportunities and challenges for development.</p> <p>Opportunities include:</p> <ul style="list-style-type: none"> resource exploitation, including agriculture; recreation and tourism. <p>Challenges include:</p> <ul style="list-style-type: none"> environmental constraints; costs/remoteness; conflicts with indigenous populations. 	<p>The study of two contrasting cold environments to illustrate:</p> <ul style="list-style-type: none"> the ways in which cold environments provide economic opportunities, such as resource exploitation and recreation and tourism; the ways in which the development of cold environments presents social, economic and environmental challenges, including: <ul style="list-style-type: none"> conflicts with indigenous populations; costs of development; environmental impacts.
How can cold environments be managed to ensure sustainability?	<p>Managing cold environments is often about balancing socio-economic and environmental needs. This requires careful management to ensure sustainability.</p>	<p>The study of two contrasting cold environments to illustrate:</p> <ul style="list-style-type: none"> how such fragile environments can be exploited for short-term gains; how careful management can help to ensure sustainable development in fragile environments.

Key Concepts:

- Cold environment landscapes vary dependent on space and location
- Cold environment landscapes change over time
- Cold environments have landscapes that result from a variety of factors
- Cold environment landscapes are shaped by the interaction of a variety of interdependent and interconnected activities and processes
- Cold environments are a fragile and important ecosystem
- The development of cold environments results in opportunities and challenges

Associated Skills:

- Analysis of a variety of types of image
 - Map work at a variety of scales, eg identification of features of former glaciation
 - Statistical analysis, including charts and graphs
 - Use of GIS and other modern technology, eg in identifying resources, spatial and temporal changes in cold environments
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Hot arid / semi-arid environments

<i>Questions for Investigation</i>	<i>Key Ideas</i>	<i>Content</i>
What processes and factors give hot arid / semi-arid environments their distinctive characteristics?	<p>The distinctive characteristics of hot arid / semi-arid environments are a result of climatic and geomorphological processes.</p> <p>These processes are influenced by a range of factors, which vary from place to place.</p>	<p>The study of a hot arid / semi-arid environment or environments to illustrate:</p> <ul style="list-style-type: none"> the impact of climate and weathering on the physical landscape the way that wind and water shape the landscape to produce distinctive landforms, including sand dunes, canyons and canyon landscapes, sculptured rocks, wadis and salt pans.
Why are hot arid / semi-arid environments considered to be 'fragile'?	<p>Climatic extremes lead to finely balanced ecosystems which can be easily damaged.</p> <p>Both flora and fauna can suffer as a result of change, and regeneration is difficult in the harsh conditions.</p>	<p>The study of one hot arid / semi-arid environment to illustrate:</p> <ul style="list-style-type: none"> the impact of climate on the nature of the ecosystem; how both physical and human factors make the environment ecologically vulnerable.
What are the issues associated with the development of hot arid / semi-arid environments?	<p>Hot arid / semi-arid environments provide opportunities and challenges for development.</p> <p>Opportunities include:</p> <ul style="list-style-type: none"> resource exploitation, including agriculture; recreation and tourism. <p>Challenges include:</p> <ul style="list-style-type: none"> environmental constraints; costs/remoteness; conflicts with indigenous populations. 	<p>The study of two contrasting hot arid / semi-arid environments to illustrate:</p> <ul style="list-style-type: none"> the ways in which hot arid / semi-arid environments provide economic opportunities such as resource exploitation, agriculture, and recreation and tourism; the ways in which the development of hot arid / semi-arid environments presents social, economic and environmental challenges, including: <ul style="list-style-type: none"> conflicts with indigenous people; costs of development; environmental impacts.

How can hot arid / semi-arid environments be managed to ensure sustainability?

Managing hot arid / semi-arid environments is often about balancing socio-economic and environmental needs. This requires careful management to ensure sustainability.

The study of **two** contrasting hot arid / semi-arid environments to illustrate:

- how such fragile environments can be exploited for short-term gains;
 - how careful management can help to ensure sustainable development in fragile hot arid / semi-arid environments.
-

Key Concepts:

- The development of hot arid / semi-arid environment landscapes varies with location
 - Hot arid / semi-arid landscapes
 - change over time and space
 - result from a variety of factors
 - consist of a variety of interdependent and interconnected activities and processes
 - Hot arid / semi-arid environments are complex, fragile and important
 - Hot arid / semi-arid environments globally have a variety of uses
 - The development of hot arid / semi-arid environments results in opportunities and challenges
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Associated Skills:

- Analysis of a variety of types of image
 - Map work at a variety of scales, eg identification of evidence of past wetter climates in an area
 - Statistical analysis, including charts and graphs
 - Use of GIS and other modern technology, eg in the analysis of desertification and environmental degrading in sub-Saharan Africa
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3.2 AS Unit F762: *Managing Change in Human Environments*

The aims of this unit are for candidates to develop knowledge and understanding of:

- the factors that produce a diverse variety of human environments;
- the dynamic nature of environments that change over time and place;
- the importance of place and the diverse nature of its interdependent connections;
- how modern technologies are used, such as GIS, remote sensing, etc, to understand the complexities of human environments;
- the interdependence of human environments, and the dynamics of interaction between people and the environment;
- the causes of, and the processes involved in, changes to human environments;
- the need for sustainable management;
- areas of current and future challenge and opportunity for these environments.

The key ideas stated in the Specification identify the concepts underpinning the unit content.

Candidates should study all topics in this unit – ie *Managing urban change* AND *Managing rural change* as well as *The energy issue* AND *The growth of tourism*.

There is an expectation that an investigation or fieldwork will be carried out to research the form and nature of urban or rural environments.

Managing urban change

<i>Questions for Investigation</i>	<i>Key Ideas</i>	<i>Content</i>
What are the characteristics of urban areas?	Urban areas have a variety of functions, processes and distinct patterns of land use. The patterns of land use are influenced by a number of factors and these vary from place to place.	The study of two urban areas, including practical research or out-of-classroom work – fieldwork, to illustrate: <ul style="list-style-type: none"> • the range of functions found in urban areas including industrial, commercial, residential and recreational; • the land-use patterns that develop in urban areas; • the social, economic, political and environmental factors that influence land-use patterns.

<i>Questions for Investigation</i>	<i>Key Ideas</i>	<i>Content</i>
What are the social and economic issues associated with urban change?	Urban growth and decay can lead to a variety of social and economic issues in urban areas.	The study of two contrasting urban areas to illustrate: <ul style="list-style-type: none"> • why socio-economic deprivation occurs; • the characteristics of urban deprivation, including economic wellbeing, housing and environmental quality and social conditions; • the social and economic differences existing in urban areas; • the problems of managing the growing demand for services such as health, education and public transport.
What are the environmental issues associated with urban change?	Urban change can put increasing pressures on the environment including: <ul style="list-style-type: none"> • traffic congestion; • atmospheric pollution; • water pollution; • urban dereliction; • waste disposal. 	The study of two contrasting urban areas, including practical research or out-of-classroom work – fieldwork, to illustrate: <ul style="list-style-type: none"> • the problems of traffic congestion and atmospheric pollution and their management; • the problems of managing increasing volumes of waste; • the problems of managing the growing demand for services such as water and sanitation; • how urban change can create areas of dereliction.
How can urban areas be managed to ensure sustainability?	Sustainable management requires an understanding of the dynamic nature of social/economic/political processes in urban areas. The sustainable development of urban areas requires a careful balance of socio-economic and environmental planning.	The study of at least one example to illustrate how planning and management practices are enabling urban areas to become increasingly sustainable.

Key Concepts:

- Urban landscapes
 - consist of a variety of interdependent and interconnected activities and processes
 - change over time and space and will vary dependent on their location
 - have certain characteristics and result from a variety of factors
- Change in urban areas will produce a variety of impacts
- Urban change results in opportunities and challenges
- Can urban development be sustainable?

Associated Skills:

- Fieldwork to investigate urban characteristics and processes
 - Analysis of a variety of types of image
 - Map work at a variety of scales, eg the use of Goad maps
 - Statistical analysis, including charts and graphs
 - Use of GIS and other modern technology, eg traffic-flow management schemes, the nature and rate of development in urban landscapes globally
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Managing rural change

<i>Questions for Investigation</i>	<i>Key Ideas</i>	<i>Content</i>
What are the characteristics of rural areas?	<p>Rural areas have a variety of functions, processes and opportunities.</p> <p>The range of functions and opportunities are influenced by a number of factors and these vary from place to place.</p>	<p>The study of two rural areas, including practical research or out-of-classroom work – fieldwork, to illustrate:</p> <ul style="list-style-type: none">• the range of functions found in rural areas;• the range of opportunities that exist in rural areas;• the factors that influence the development of rural areas, including economic, social, political and environmental factors.
What are the social and economic issues associated with rural change?	<p>Structural change can lead to economic and social differences within and between rural areas.</p> <p>Lack of economic opportunities in rural areas can lead to depopulation and decline.</p>	<p>The study of two contrasting rural areas, including practical research or out-of-classroom work – fieldwork, to illustrate:</p> <ul style="list-style-type: none">• the factors that lead to growth or decline in rural areas;• the economic and social problems associated with growth and development in rural areas;• the economic and social problems associated with decline in rural areas.
What are the environmental issues associated with rural change?	<p>The changing use of rural areas can put increasing pressures on the environment including:</p> <ul style="list-style-type: none">• land-use change;• traffic congestion and pollution;• land degradation;• water pollution;• rural dereliction.	<p>The study of two contrasting rural areas to illustrate the associated problems with, and management of:</p> <ul style="list-style-type: none">• traffic congestion;• the increasing use of rural areas for recreation and leisure;• the environmental issues associated with building developments in rural areas;• the impacts of changes in farming on the environment;• (the problems of) overuse of the physical environment including land degradation and pollution.

<i>Questions for Investigation</i>	<i>Key Ideas</i>	<i>Content</i>
How can rural areas be managed to ensure sustainability?	<p>Sustainable management requires an understanding of the dynamic nature of social/economic/political processes in rural areas.</p> <p>The sustainable development of rural areas requires a careful balance of socio-economic and environmental planning.</p>	The study of at least one example to illustrate how planning and management practices are enabling rural areas to become increasingly sustainable.

Key Concepts:

- Rural landscapes
 - will evolve over time and space
 - vary with location
 - have certain characteristics and result from a variety of factors
 - consist of a variety of interdependent and interconnected activities and processes
- Change in rural areas produces a variety of impacts
- Rural change results in a variety of opportunities and challenges
- Sustainability in rural areas

Associated Skills:

- Fieldwork to investigate rural characteristics and processes
- Analysis of a variety of types of image
- Map work at a variety of scales, eg rural land-use maps
- Statistical analysis, including charts and graphs
- Use of GIS and other modern technology, eg in terrain analysis

The energy issue

<i>Questions for Investigation</i>	<i>Key Ideas</i>	<i>Content</i>
What are the sources of energy and how do these vary in their global pattern?	The global energy mix is made up of both finite and renewable sources, which vary in their availability over time and space.	The study of the global pattern of energy supply to illustrate: <ul style="list-style-type: none"> the availability of finite and renewable resources in different parts of the world; the physical, economic and political reasons for the variable pattern of energy supply over time and space.
What is the relationship between energy use and economic development?	As economies develop, there is an increased demand for energy.	The study of the global pattern of energy use in relation to economic development, to include an examination of the statistical relationship between energy use and level of development. The study of two contrasting countries to illustrate: <ul style="list-style-type: none"> the energy use and mix associated with a highly developed economy; the energy mix associated with a country at the lower end of the development spectrum; why these differences occur.
What are the social, economic and environmental issues associated with the increasing demand for energy?	The exploitation of energy resources brings both, opportunities and problems for people and the environment.	The study of two contrasting examples to illustrate: <ul style="list-style-type: none"> the social and economic opportunities created by the exploitation of energy resources, including employment, community development and economic sustainability; the problems created by the exploitation of energy resources for people and the environment, including conflicts with indigenous populations, economic issues and environmental degradation.
How can energy supply be managed to ensure sustainability?	Managing energy supply is often about balancing socio-economic and environmental needs. This requires detailed planning and management.	The study of at least one example to illustrate how energy demand can be satisfied in an increasingly sustainable way – including the development of renewable energy resources.

Key Concepts:

- A variety of interdependent and interconnected activities and processes will dictate levels of energy demand and supply
- Energy needs and supplies vary depending on location
- Demand for energy and methods of supply have evolved, and will continue to evolve, over time and space
- Areas have certain characteristics of energy production and these are the result of a variety of complex factors
- Changes in demand and supply of energy produces a variety of impacts
- Energy demand and supply are an expression of the interaction of the environment and the people
- Changes in demand and supply of energy result in opportunities and challenges
- Can the provision of energy supplies be sustainable?

Associated Skills:

- Analysis of a variety of types of image, eg exploitation of energy reserves and environmental impact, impact of renewable energy projects such as wind farms
 - Map work at a variety of scales, eg the identification of suitable sites for a range of types of power stations
 - Statistical analysis including charts and graphs, eg showing change in energy sources in various countries, predicting future patterns of energy provision
 - Use of GIS and other modern technology, eg in monitoring energy use
-

The growth of tourism

<i>Questions for Investigation</i>	<i>Key Ideas</i>	<i>Content</i>
In what ways has the global pattern of tourism changed?	<p>Tourism has developed into a global industry in the last fifty years and now features in every continent.</p> <p>The growth of tourism and its changing patterns are influenced by a variety of factors and these vary from place to place.</p>	<p>The study of the global pattern of the growth of tourism to illustrate:</p> <ul style="list-style-type: none"> • changes in location and type of tourism; • the social, economic and political reasons for the growth of global tourism.
What is the relationship between the growth of tourism and economic development?	As economies develop there is an increased demand for tourism.	<p>The study of the global pattern of tourism in relation to economic development, to include an examination of the statistical relationship between levels of tourism and levels of development. The study of two contrasting countries to illustrate:</p> <ul style="list-style-type: none"> • how economic development has increased the demand for global and regional tourism; • how tourism can play a significant part in the economic development of an area; • why there is a relationship between tourism and development.
What are the social, economic and environmental issues associated with the growth of tourism?	Tourism brings both opportunities and problems for people and the environment.	<p>The study of two contrasting examples to illustrate:</p> <ul style="list-style-type: none"> • the opportunities created by the growth of tourism for people and the environment, including employment, infrastructure, community development and environmental protection; • the problems created by the growth of tourism for people and the environment, including population displacement, changing community structure, social issues, seasonality and environmental degradation.

How can tourism be managed to ensure sustainability?

Managing tourism to ensure sustainability is about balancing socio-economic and environmental needs. This requires detailed planning and management.

The study of at least **one** example to illustrate how sustainable tourism, including eco-tourism, operates in conjunction with communities and the environment.

Key Concepts:

- The nature and extent of tourism varies with location
- The nature of tourism will change over time
- Tourism is an expression of the interaction of the environment and the people
- Tourism consists of a variety of interdependent and interconnected activities and processes
- Growth in tourism produces a variety of impacts
- Changes in the scale and nature of tourism result in opportunities and challenges
- Can tourism be sustainable?

Associated Skills:

- Analysis of a variety of types of image, eg evaluating the impact of tourist development on fragile ecosystems
 - Map work at a variety of scales, eg the analysis of the site plans of tourist developments
 - Statistical analysis including charts and graphs, eg analysing change in the nature and pattern of tourism
 - Use of GIS and other modern technology, eg in measuring tourist impact on the environment
-

3.3 A2 Unit F763: *Global Issues*

The aims of this unit are for candidates to develop:

- the ability to identify and quantify issues of global concern;
- an understanding that such issues are dynamic, that they change over time and place;
- an appreciation of place and the diverse nature of its interdependent connections;
- an understanding of the interdependence of environments and the dynamic interaction between people and the environment;
- a knowledge of the use of modern technologies, such as GIS, remote sensing, etc to understand the nature and impact of global issues;
- a knowledge and understanding of the potential of ICT and its relevance to global issues;
- the ability to select and use appropriate GIS skills and techniques to explore global issues;
- an understanding of the diverse and dynamic factors responsible for global issues;
- an understanding of how the effects of global issues may vary between countries at different stages on the development continuum (MEDCs, NICs and LEDCs);
- an understanding and evaluation of the diversity of responses to global issues;
- the ability to synthesise understanding and knowledge from physical and human geography to develop explanation, connections and make evaluative judgements;
- an ability to carry out individual research/investigative work, including fieldwork;
- an understanding of geographical ideas, concepts and processes;
- the skills to identify, analyse and evaluate the connections between the different aspects of geography;
- the ability to analyse and synthesise geographical information in a variety of forms and from a range of sources;
- an understanding of new ideas and developments about the changing nature of geography in the 21st century;
- the ability to critically reflect on, and evaluate the potential and limitations of, approaches and methods used both inside and outside the classroom.

The key ideas stated in the Specification identify the concepts underpinning the unit content.

Candidates select and study **three** topics. At least **one** topic must be chosen from Section A: *Environmental Issues* and at least **one** topic must be chosen from Section B: *Economic Issues*.

Section A: Environmental Issues

At least **one** topic must be chosen from this section.

Option A1: Earth hazards

Candidates need to have a knowledge and understanding of the meaning of 'hazards', their degree of predictability and that they make both short- and long-term impacts on an environment and community. Case studies should be selected from different areas and at scales appropriate to the hazards being examined.

Earth hazards

<i>Questions for Investigation</i>	<i>Key Ideas</i>	<i>Content</i>
What are the hazards associated with mass movement and slope failure?	Mass movement is more likely to occur when both physical and human factors disturb the equilibrium of a slope. Mass movement has a range of environmental and social impacts on the areas affected, which create a range of human responses to the hazard.	<p>The study of the processes and conditions that lead to mass movements:</p> <ul style="list-style-type: none">• physical conditions (including slope angle, weathering, vegetation, climate and weather, drainage and rock types) and human activities (including deforestation, adding weight, undercutting slopes, quarrying) leading to the various types of mass movement;• processes involved in the main types of mass movement: slides, flows and creeps. <p>The study of at least two mass movement events to illustrate:</p> <ul style="list-style-type: none">• the interaction of physical and human factors in causing the hazard events;• the resulting impacts (environmental, social and economic);• the human reaction in both short term (emergency rescue) and long term (planning and management).

<i>Questions for Investigation</i>	<i>Key Ideas</i>	<i>Content</i>
What are the hazards associated with flooding?	Flood risk reflects a combination of physical and human factors and these vary from place to place. Flooding has a range of environmental and social impacts on the areas affected, which create a range of human responses to the hazard.	The study of one river and one coastal area prone to flooding to illustrate: <ul style="list-style-type: none"> the physical factors involved (including height, relief, drainage regime, climate, vegetation, rock type); the human factors involved (including settlement building, farming, deforestation, drainage); the resulting impacts (environmental, social and economic) of flooding; the human reaction in both the short term (emergency rescue) and long term (planning and management).
What are the hazards associated with earthquake and volcanic activity?	Earthquakes and volcanic eruptions are caused by plate tectonics and bring distinctive impacts to an area and these vary from place to place. Earthquakes and volcanic eruptions have a range of environmental and social impacts on the areas affected, which create a range of human responses to the hazard.	The study of an earthquake and of a volcanic eruption to illustrate: <ul style="list-style-type: none"> the tectonic processes involved in creating these hazards; scale and types of impacts (environmental, social and economic), together with the concept of primary (initial impacts – destruction, casualties, landslides, fires) and secondary impacts (including disease, infrastructure problems, resettlement); the human reaction in both the short term (emergency rescue) and long term (planning & management).
Why do the impacts on human activity of such hazards vary over time and location?	The degree of impact on an area reflects its level of economic and technological development as well as the population density. Impacts can vary over time from immediate to long term.	The study of contrasting examples to illustrate: <ul style="list-style-type: none"> a contrast between countries at either end of the development continuum and between rural and urban areas, to compare the impacts of, and reactions to, at least two contrasting types of earth hazards; a comparison of impacts over short and long time periods for at least two contrasting types of earth hazards.

<i>Questions for Investigation</i>	<i>Key Ideas</i>	<i>Content</i>
How can hazards be managed to reduce their impacts?	There are various ways to manage or reduce the impacts of hazards.	<p>The study of different approaches to managing earth hazards to illustrate:</p> <ul style="list-style-type: none"> • the extent to which earth hazards are predictable; • the management strategies used to reduce the possible impact of a hazard; • the effectiveness of managing earth hazards.

Key Concepts:

- The nature of hazards varies with location
- The nature of hazards changes over time and space
- Earth hazards consist of a variety of interdependent and interconnected activities and processes
- Physical geography and human activity are interdependent and their interaction can produce hazards
- The impact of such hazards varies over time and given location
- Populations and environments respond in a variety of ways to hazards
- The management of hazards results in opportunities and challenges

Associated Skills:

- Research into hazard events
- Analysis of a variety of types of image
- Map work at a variety of scales, eg hazard mapping
- Statistical analysis, eg analysing patterns and severity of hazard
- Use and application of GIS and other modern technology, eg forecasting of earthquakes and eruptions

Option A2: Ecosystems and environments under threat

Candidates need to have a knowledge and understanding of the meaning of 'ecosystems' and 'environment'; that a variety of them can be defined; their variability; and that their sustainability is under threat from short- and long-term impacts of natural and human factors. Case studies should be selected from different areas and at scales appropriate to the question being examined.

Ecosystems and environments under threat

Questions for Investigation	Key Ideas	Content
What are the main components of ecosystems and environments and how do they change over time?	Ecosystems and environments are systems in which a number of components (physical and human) interact. Environments are subject to constant change as the physical conditions and human activities operating upon them change.	The study of ecosystems to illustrate: <ul style="list-style-type: none"> • the concept of open and closed systems; • the interconnections between stores and flows in an ecosystem, including energy flows; • how change occurs in an ecosystem as a result of the interaction of physical and human factors.
What factors give the chosen ecosystem or environment its unique characteristics?	It is the interaction of the physical and human factors that create distinctive environments and lead to change within them.	The study of at least one local ecosystem or environment, eg woodland, dunes or a marsh, to illustrate: <ul style="list-style-type: none"> • the main stores and flows within the ecosystems; • the main physical factors influencing the chosen environment (including: microclimate, soil, relief, drainage) and how it may develop with time; • the main human influences on the chosen ecosystem or environment (including: conservation, pollution, agriculture, settlement) and how these may generate change with time.

<i>Questions for Investigation</i>	<i>Key Ideas</i>	<i>Content</i>
In what ways are physical environments under threat from human activity?	Human activity poses threats to physical environments in both planned and unintended ways.	The study of at least one local ecosystem or environment, eg woodland, dunes or a marsh, to illustrate: <ul style="list-style-type: none"> the threats to, and the impacts on, the physical environment posed by a range of human activities (including: agriculture/ forestry, settlement, transport, industry and mineral extraction); the role that conservation can play in reducing the threats to the environment.
Why does the impact of human activity on the physical environment vary over time and location?	The impact of human activity on environments varies as areas develop, and varies between different areas of the world at different stages of economic and technological development.	The study of the contrast between countries at either end of the development continuum to illustrate: <ul style="list-style-type: none"> the different ways human activity can impact on physical environments (both positive and negative); why the impact on physical environments may be increasing or decreasing with economic, social and technological development.
How can physical environments be managed to ensure sustainability?	When human activity impacts on physical environments they may need to be managed in order to be sustainable.	The study of at least one example of sustainable environmental management of a located physical environment to illustrate: <ul style="list-style-type: none"> the ways in which physical environments can/may be managed (including conservation, planning controls, restricted use).

Key Concepts:

- The nature of threatened ecosystems and the threat posed to them varies with location and over time
- Ecosystems and environments of this nature consist of a variety of interdependent and interconnected activities and processes
- Ecosystems have distinctive characteristics resulting from the interaction of a variety of factors
- Human activity and environmental factors often threaten ecosystems for a variety of reasons
- The impact of human activity varies over time and location
- There are diverse ways of managing an ecosystem in a sustainable way

Associated Skills:

- Research and/or fieldwork to investigate ecosystem characteristics and processes and how these are threatened
 - Analysis of a variety of types of image, eg analysis of changes in land use patterns in threatened ecosystems
 - Map work at a variety of scales, eg soil maps
 - Statistical analysis, including charts and graphs
 - Use and application of GIS and other modern technology, eg in measuring, recording and analysing flows in the ecosystem or environment
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Option A3: Climatic hazards

Candidates need to have a knowledge and understanding of the meaning of 'hazards', their degree of predictability and that they make both short- and long-term impacts on an environment and community. Case studies should be selected from different areas and at scales appropriate to the hazards being examined.

Climatic hazards		
Questions for Investigation	Key Ideas	Content
What conditions lead to tropical storms (hurricanes, typhoons or cyclones) and tornadoes and in what ways do they represent a hazard to people?	Tropical storms and tornadoes form and develop under particular atmospheric conditions to become major hazards. These hazards have serious environmental, social and economic impacts upon the areas they affect.	<p>The study of the development of tropical storms and tornadoes to illustrate:</p> <ul style="list-style-type: none"> • the atmospheric and surface conditions that give rise to their development; • an understanding, with examples, of how such systems develop; • through examples, the hazards they present to particular areas and the impacts that these hazards can have.
How do atmospheric systems cause heavy snowfall, intense cold spells, heatwaves and drought and in what ways do they represent a hazard to people?	Atmospheric systems (anticyclones and depressions) can produce extreme weather under certain circumstances, resulting in hazards for people. These hazards have serious environmental, social and economic impacts upon the areas they affect.	<p>The study of high and low pressure systems and air masses to illustrate:</p> <ul style="list-style-type: none"> • the formation of these hazards, ie heavy snowfall, frost, drought; • how they represent hazards to people through blizzards, cold spells, heatwaves and droughts; • the impacts associated with these weather features for named areas at the local, regional and global scale, including impacts on: <ul style="list-style-type: none"> – transport; – agriculture and forestry; – health; – economic activity.

<i>Questions for Investigation</i>	<i>Key Ideas</i>	<i>Content</i>
Why do the impacts of climatic hazards vary over time and location?	The degree of impact on an area is related to a variety of factors, including the level of economic and technological development and population density. Impacts can vary over time from immediate to long term.	The study of contrasting examples to illustrate: <ul style="list-style-type: none"> • a contrast between countries at either end of the development continuum, rural and urban areas, coastal and inland areas, to compare both the impacts of and reactions to at least two contrasting types of climatic hazards; • how impacts can vary over short and long time periods for at least two contrasting types of climatic hazards.
What can humans do to reduce the impact of climatic hazards?	There are a variety of ways to manage or reduce the impacts of climatic hazards.	The study of different approaches to managing atmospheric hazards to illustrate: <ul style="list-style-type: none"> • the extent to which climatic hazards can be predicted; • different management strategies to reduce their impacts.
In what ways do human activities create climatic hazards?	Human activities may impact on the global climate to create particular climatic hazards.	The study of the causes and effects of global warming and global dimming. The study for one named area of the causes of, impacts on and solutions to, <i>either acid rain or photochemical smog</i> .

Key Concepts:

- The nature and impact of hazards vary with space, location and over time
- Climatic hazards consist of a variety of interdependent and interconnected activities and processes
- Physical geography and human activity are interdependent and can together produce hazards
- The impact of such hazards varies over time and location
- Populations and environments respond in a variety of ways to hazards
- The management of hazards results in opportunities and challenges

Associated Skills:

- Research into hazard events and their impact
 - Analysis of a variety of types of image
 - Map work at a variety of scales, eg climatic hazard mapping
 - Statistical analysis including charts and graphs, eg plotting changes in weather observations over time
 - Use and application of GIS and other modern technology, eg tracking and forecasting hurricanes, analysis of effect of global warming over time
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Section B: Economic Issues

At least **one** topic must be chosen from this section.

Option B1: Population and resources

Candidates need to have a knowledge and understanding of the meaning of 'resources', their variability in supply, type and locational extent. Population, in turn, should be seen both as a stimulation for the development and exploitation of resources and as consumers of resources. Case studies should be selected from different areas and at scales appropriate to the resources being examined.

Population and resources

<i>Questions for Investigation</i>	<i>Key Ideas</i>	<i>Content</i>
How and why does the number and rate of growth of population vary over time and space?	Population is dynamic and changes in response to a number of demographic, social, economic and political factors. The factors vary from place to place.	The study of how populations grow over time to illustrate: <ul style="list-style-type: none">• the roles of natural increase and net migration;• how population growth is related to concepts of overpopulation and underpopulation;• global contrasts in population growth;• how the rate of growth is changing over time.
How can resources be defined and classified?	There are a variety of ways of defining and classifying resources including by source, by use and extent of renewability.	The study of different types of resource to illustrate: <ul style="list-style-type: none">• the differences between renewable, non-renewable, flow and semi-renewable resources;• how changes in technology and society may result in changes in the definition of resources.

What factors affect the supply and use of resources?

The supply and use of resources is determined by a combination of physical and socio-economic factors.

The study of at least **two** resources including **one** non-energy resource, eg mineral, foodstuff, fish, forestry, scenery, to illustrate:

- the physical factors (including climate, geology, water, soil, vegetation) influencing their supply and use;
 - the human factors (including technology, capital, transport, population, industry, energy/power supplies, agriculture) influencing their supply and use;
 - how and why these factors have changed with time.
-

<i>Questions for Investigation</i>	<i>Key Ideas</i>	<i>Content</i>
Why does the demand for resources vary with time and location?	Different parts of the world have differing demands (in terms of quantities and types of resources) and these change with time and development.	The study of the contrast between countries at either end of the development continuum in their resource supply and use to illustrate: <ul style="list-style-type: none"> the link between population size/growth and standard of living and the demand for different resources over time; the different patterns of demand in MEDC, NIC and LEDC and how these change with population growth and the rate of development.
In what ways does human activity attempt to manage the demand and supply of resources and development?	Both the demand for, and supply of, resources need to be planned and managed to achieve a sustainable system.	The study of contrasting types of management and planning strategies used to balance demand and supply for at least two different resources, to include: <ul style="list-style-type: none"> at least one case study of attempts to make resource development sustainable.

Key Concepts:

- The nature of populations and their demand for resources vary with location
- The nature of populations and demand for resources and their interrelationship change over time and space
- The use and development of resources consist of a variety of interdependent and interconnected activities and processes
- Population changes in number and characteristics over time
- Various dynamic environmental factors influence the demand for and supply of resources
- Demand for and supply of resources vary over time and with location
- The management of resources results in opportunities and challenges
- There are diverse strategies for managing resources in a sustainable way

Associated Skills:

- Research and/or fieldwork into population characteristics and/or resources
- Analysis of a variety of types of image
- Map work at a variety of scales
- Statistical analysis including charts and graphs, eg population pyramids, and analysis of dependency ratios
- Use and application of GIS and other modern technology, eg remote sensing of mineral resources

Option B2: Globalisation

Candidates need to have a knowledge and understanding of the meaning of 'globalisation', why it has developed and its implications for communities and the environment. Case studies should be selected from different areas and at scales appropriate to the issues being examined.

Globalisation		
Questions for Investigation	Key Ideas	Content
What is meant by the term 'globalisation' and why is it occurring?	There are marked advantages for economic activity in working at a global rather than local scale.	The study of the processes of globalisation to illustrate: <ul style="list-style-type: none"> the meanings of globalisation in both economic and cultural terms; the range of factors responsible for this process and the possible future trends.
What are the issues associated with globalisation?	Globalisation of economic activity may bring advantages and disadvantages to various areas. These impacts may be environmental, economic, social or political.	The study of the impact of globalisation to illustrate: <ul style="list-style-type: none"> the environmental, economic, social and political benefits and problems created in both a NIC and a MEDC; whether globalisation is increasing or narrowing the 'development gap' (with the aid of statistical analysis).
What are transnational corporations (TNCs) and what is their contribution to the countries in which they operate?	Transnational corporations may create both positive and negative impacts on an area.	The study of TNCs to illustrate: <ul style="list-style-type: none"> how TNCs may be defined and the ways in which they have developed over time; two case studies of contrasting spatial and organisational structures; the advantages and disadvantages to countries at either end of the development continuum of at least one TNC operation.

How far do international trade and aid influence global patterns of production?	Trade and aid both support and hinder the broader balance of the world's patterns of production.	<p>The study of global trade patterns to illustrate:</p> <ul style="list-style-type: none"> • the structure, direction and impact of trade for an example of each of a LEDC, NIC and MEDC; • the role of international trade negotiations and agreements. <p>The study of global patterns of aid to illustrate:</p> <ul style="list-style-type: none"> • the different types of aid; • the advantages and disadvantages of aid for both donor and recipient countries; • examples of short-term emergency aid and examples of long-term development aid.
How can governments evaluate and manage the impact of globalisation?	Governments vary in their responses to the impacts of globalisation and are increasingly looking to reduce the harmful impacts.	The study of the different ways of measuring and evaluating the impact of globalisation through a case study of how at least one country is managing the impacts of globalisation on its economy and society.

Key Concepts:

- The nature of globalisation and interrelationships change over time and space
- Globalisation consists of a variety of interdependent and interconnected activities and processes
- The nature and extent of globalisation varies with location
- There are distinctive and diverse features of globalisation and they can also change over time
- Various opportunities and challenges are produced by globalisation
- Transnational corporations, trade and aid all influence global patterns of interdependence and interconnection
- Governments try to manage the diverse nature of challenges and impact of globalisation

Associated Skills:

- Research and/or fieldwork into globalisation features and/or TNCs
- Analysis of a variety of types of image
- Map work at a variety of scales
- Statistical analysis including charts and graphs, eg use of indexes of development
- Use and application of GIS and other modern technology, eg role of Sat Nav and global positioning technologies

Option B3: Development and inequalities

Candidates need to have a knowledge and understanding of the meaning of 'inequalities'; why they may develop; and their implications for communities and the environment. Case studies should be selected from different areas and at scales appropriate to the issues being examined. Gender inequalities should be considered throughout, where appropriate.

Development and inequalities		
Questions for Investigation	Key Ideas	Content
In what ways do countries vary in their levels of economic development and quality of life?	Countries vary in their levels of economic development and this, in turn, influences the quality of life (such as standard of living) of their citizens.	<p>The study of global patterns of economic development and quality of life to illustrate:</p> <ul style="list-style-type: none"> • different ways of measuring the level of development and quality of life (both quantitative and qualitative); • the contrast in the level of development and the quality of life between LEDCs, NICs and MEDCs (with the aid of statistical analysis and case studies).
Why do levels of economic development vary and how can they lead to inequalities?	Various factors influence the rate and level of development and this in turn may increase or decrease economic and social inequalities.	<p>The study of the relative level of development of countries to illustrate:</p> <ul style="list-style-type: none"> • the factors (physical, economic, social, political and historical) that influence the relative level of economic development of a country; • how economic development can increase or decrease various inequalities between countries and within one named country.
To what extent is the 'Development Gap' increasing or decreasing?	Some areas are finding it very difficult to develop economically so the inequality gap between the richer and poorer areas is increasing; whilst others are developing rapidly, narrowing the gap.	<p>The study of the concept of the 'Development Gap' to illustrate:</p> <ul style="list-style-type: none"> • what the 'Development Gap' is and why it exists (models such as the Core-periphery, Friedmann and Rostow are helpful); • the factors (physical, economic, social and political) that may be increasing or decreasing this 'Gap'.

<i>Questions for Investigation</i>	<i>Key Ideas</i>	<i>Content</i>
In what ways do economic inequalities influence social and environmental issues?	Economic inequalities may result in social and environmental conditions also becoming unequal.	The study of variations in social and environmental conditions to illustrate: <ul style="list-style-type: none"> • variations in pollution (air, water, solid, noise, etc) in both a MEDC and a NIC; • the economic and social inequalities within one named region or large city resulting from the interlinking of economic and social factors.
To what extent can social and economic inequalities be reduced?	It is important to reduce extreme inequalities and various approaches have been tried with differing degrees of success.	The study of the management of social and economic inequalities to illustrate: <ul style="list-style-type: none"> • the variety of methods that can be employed to tackle social and economic inequalities and their impacts (including the use of law, education, planning, subsidies, taxation); • the reasons for, and the methods used in, reducing social and economic inequalities in one named country.

Key Concepts:

- The development process consists of a variety of interdependent and interconnected activities and processes
- The development process has diverse characteristics and they change over time
- The nature of development and the resulting inequalities vary with location
- The nature of development and inequalities and their interrelationships change over time and space
- Development impacts on the environment and quality of life and can lead to inequalities
- Inequalities are dynamic and, in turn, influence social and environmental issues
- A variety of attempts are being made to manage or reduce inequalities

Associated Skills:

- Research and/or fieldwork into the scale and type of inequalities
- Analysis of a variety of types of image
- Map work at a variety of scales
- Statistical analysis including charts and graphs, eg quality of life index
- Use and application of GIS and other modern technology, eg use and processing of census data to identify patterns of deprivation

A2 Unit F764: *Geographical Skills*

The aims of this unit are for candidates to develop:

- knowledge and an understanding of the process of geographical research, including fieldwork;
- the skills necessary to complete a piece of individual geographical research;
- the use of technology, eg GIS, remote sensing, etc as research tools;
- a knowledge and understanding of the potential of ICT and its relevance to geographical change;
- the ability to select and use appropriate GIS skills and techniques to explore geographical issues including decision-making and problem-solving;
- an awareness of the problems involved in undertaking individual geographical investigation/research;
- an understanding that interpretation and evaluation of research results should reflect the links and connections between diverse elements of geography.

This Unit is designed to be synoptic. Candidates will use skills in geographical research and investigations/fieldwork acquired during AS and A2. Candidates need to have undertaken individual research on a geographical topic of their choice, following the stages in investigation listed in the table below. This individual research/investigation should be based on any of the topics addressed in Units F761, F762 and F763. It should provide clear evidence of extension and synthesis of understanding and skills.

Geographical skills

<i>Stages in Investigation</i>	<i>Key Ideas</i>	<i>Content</i>
1 Identify a suitable geographical question or hypothesis for investigation.	A successful geographical investigation is dependent upon identifying a clear geographical question at a scale that is practical in research terms.	The question/hypotheses should be: <ul style="list-style-type: none"> • at a suitable scale; • capable of research; • clearly defined and of a clear geographical nature; • based upon wider geographical theories, ideas, concepts or processes.
2 Develop a plan and strategy for conducting the investigation.	A successful geographical investigation requires careful planning, which balances the needs for accuracy and reliability against limitations imposed by time, resources and the environment in which the investigation is being conducted.	This stage requires: <ul style="list-style-type: none"> • the identification of the data needed to examine the question/hypothesis posed; • the establishment of appropriate strategies and methods for collecting the necessary data (including sampling where appropriate); • an understanding of the limitations imposed by resources and time; • an appreciation of potential risks in undertaking the research, and methods of minimising the risk.
3 Collect and record data appropriate to the geographical question or hypothesis.	A successful geographical investigation is based upon thorough methods of data collection and recording, which consider accuracy and reliability in relation to the data being collected	This stage requires: <ul style="list-style-type: none"> • the use of primary¹ and secondary data² as appropriate to the question/hypothesis posed; • a description and explanation of different ways of collecting/recording data; • an awareness of the need for accuracy and reliability before, during and after the process of data collection.

¹ Primary data are defined as unprocessed information, which means information collected through fieldwork investigation, or material derived from other sources that has not been analysed and/or interpreted in any way. Such material might, in addition to data collected in the field, include census, telephone directories, electoral rolls, trade directories and remote-sensed data.

² Secondary data are defined as information which is derived from published documentary sources that has been analysed and/or interpreted, such as processed census data, research papers, published maps and textbooks. It also encompasses sources of specific techniques and the formulae of their calculation.

<i>Stages in Investigation</i>	<i>Key Ideas</i>	<i>Content</i>
4 Present the data collected in appropriate forms.	A successful geographical investigation involves the selection of techniques that are appropriate to the data collected, and their presentation to a high standard.	This stage requires: <ul style="list-style-type: none"> the use of appropriate techniques to present the data collected (including maps, diagrams, annotated photos and graphs); the logical organisation of the presented material in relation to the analysis; presentation of the material to a high standard relevant to the question/hypothesis posed.
5 Analyse and interpret the data.	A successful geographical investigation involves a variety of analytical approaches, ranging from the purely descriptive to detailed analysis, involving attempts to explain patterns that have been identified.	This stage requires: <ul style="list-style-type: none"> descriptions of the findings shown by the data presentation; where appropriate, analysis of the data further using statistical techniques³; interpretation of the results in relation to the original question/hypothesis posed; explanations of patterns found and of any anomalous results.
6 Present a summary of the findings and an evaluation of the investigation	A successful geographical investigation involves a clear summary of the findings and an evaluation of the success of the investigation in relation to wider geographical ideas and the methods employed and data collected.	This stage requires: <ul style="list-style-type: none"> the use of evidence presented in previous sections to provide a clear conclusion, which relates back specifically to the original question/hypothesis posed; an evaluation of the extent to which the study supports or otherwise the general geographical theories, ideas or concepts being studied; an evaluation of the limitations of the study in terms of the methods used and the data collected and suggestions for possible improvements.

³ Statistical analysis is likely to be useful in most cases. Statistical analysis includes the simple grouping of data, through descriptive statistics (such as measures of central tendency and dispersion) to tests for correlation (such as Spearman's Rank) and for difference (such as Chi-squared, Mann-Whitney U test).

4 Schemes of Assessment

4.1 AS GCE Scheme of Assessment

Geographical skills are assessed within both units. These include the ability to describe and interpret features, trends and patterns from a variety of geographical sources including:

- OS maps and thematic maps;
- maps presenting statistical data;
- data tables;
- photographs, aerial photographs and satellite and other images (including GIS);
- graphs of various types (pie, bar, line, scatter, histograms);
- diagrams (flow charts, spider diagrams, sketch diagrams and maps).

AS GCE Geography (H083)

AS Unit F761: *Managing Physical Environments*

50% of the total AS GCE marks
1.5h written paper
75 marks

This paper has **two** sections.

Section A: Candidates are required to answer **two** questions chosen from **four** structured data-response questions which are each divided into **four** parts. To do this, candidates choose **one** question from either *Coastal environments* or *River environments* and **one** question from either *Cold environments* or *Hot arid / semi-arid environments*. Questions are based upon stimulus material, which may include maps (OS and other types), written material, photographs, satellite and other images, diagrams and statistical information.

Section B: Candidates are required to answer **one** question chosen from **four** extended-writing questions. There will be one question set for each of the four environments. The question answered must be on a different topic from the two topics chosen in Section A.

Candidates answer **three** questions.

AS Unit F762: *Managing Change in Human Environments*

50% of the total AS GCE marks
1.5h written paper
75 marks

This paper has **two** sections.

Section A: Candidates are required to answer **two** questions chosen from **four** structured data-response questions which are each divided into **four** parts. To do this, candidates choose **one** question from either *Managing Urban Change* or *Managing Rural Change* and **one** question from either *The Energy Issue* or *The Growth of Tourism*. Questions are based upon stimulus material, which may include maps (OS and other types), written material, photographs, satellite and other images, diagrams and statistical information.

Section B: Candidates are required to answer **one** question chosen from **four** extended-writing questions. There will be one question set for each of the four human geography topics. The question answered must be on a different topic from the two topics chosen in Section A.

Candidates answer **three** questions.

4.2 Advanced GCE Scheme of Assessment

Geographical skills are assessed within both units. These include the ability to describe and interpret features, trends and patterns from a variety of geographical sources including:

- OS maps and thematic maps;
- maps presenting statistical data;
- data tables;
- photographs, aerial photographs and satellite and other images (including GIS);
- graphs of various types (pie, bar, line, scatter, histograms);
- diagrams (flow charts, spider diagrams, sketch diagrams and maps);
- the results of statistical analysis (for example Spearman's rank, Mann Whitney-U).

Advanced GCE Geography (H483)

AS Units as above, both units being 25% of the total Advanced GCE marks.

A2 Unit F763: *Global Issues*

30% of the total Advanced GCE marks
2.5h written paper
90 marks

This paper has **two** sections.

Section A: Candidates are required to answer **three** questions, at least **one** from **three** questions on *Environmental issues* and at least **one** from **three** questions on *Economic issues*. All questions present a set of data and candidates are expected to identify any issues they show and suggest appropriate strategies to manage them.

Section B: Candidates are required to answer **two** essay-type questions, **one** from **six** questions on *Environmental issues* and **one** from **six** questions on *Economic issues*.

Candidates answer **five** questions.

This unit is synoptic.

A2 Unit F764: *Geographical Skills*

20% of the total Advanced GCE marks
1.5h written paper, partly based on candidates' own investigation/research.
60 marks

This paper has **two** sections.

Section A: Candidates are required to answer **one** question chosen from **three** structured data-response questions which are each divided into **three** parts. These questions are based upon stimulus material, which may include maps (OS and other types), written material, photographs, satellite and other images, diagrams and statistical information; and upon the skills and techniques used during the geographical research that candidates will have undertaken at both AS and A2.

Section B: Candidates are required to answer **two** extended-writing questions. Questions focus on the skills and the techniques used during the geographical research including analysis, interpretation, evaluation and drawing conclusions.

Candidates answer **three** questions in total.

This unit is synoptic.

4.3 Unit Order

The normal order in which the unit assessments could be taken is AS Units F761 and F762 in the first year of study, leading to an AS GCE award; then A2 Units F763 and F764 leading to the Advanced GCE award. However, the unit assessments may be taken in any order.

Alternatively, candidates may take a valid combination of unit assessments at the end of their AS GCE or Advanced GCE course in a 'linear' fashion.

4.4 Unit Options (at AS/A2)

There are no optional units in the AS GCE specification; for AS GCE Geography candidates must take AS Units F761 and F762.

There are no optional units in the Advanced GCE specification; for Advanced GCE Geography candidates take AS Units F761 and F762, *and* A2 Units F763 and F764.

4.5 Synoptic Assessment (A Level GCE)

Synoptic assessment is included in both the A2 units. The definition of synoptic assessment in the context of geography is as follows.

Synoptic assessment involves assessment of candidates' ability to draw on their understanding of the connections between different aspects of the subject represented in the specification and to demonstrate their ability to 'think like a geographer'.

Synoptic assessment will require candidates to go beyond the knowledge, understanding and skills outlined in the unit content to draw upon those in previously studied units. Tasks may present candidates with questions in an unfamiliar setting or draw on material that connects various units.

Examples of synoptic assessment tasks that may be set include:

- decision-making / problem-solving / issue-evaluating exercises requiring candidates to draw together relevant knowledge, understanding and skills of the specification, to tackle a decision, problem or issue that is new to them;
- an assignment or essay question covering geographical issues or problems requiring candidates to draw together and apply relevant integrated knowledge, understanding and skills of the specification;

- an essay question exploring key geographical concepts through linkages between physical, human and environmental geography;
- an assessment on a particular region or area, which is on a scale that allows candidates to draw together and apply relevant knowledge, understanding and skills of processes or concepts of the specification;
- the use of research and investigation skills in Unit F764 based on examples drawn from work carried out at AS and in A2 Unit F763.

4.6 Assessment Availability

There are **two** examination series each year, in January and June.

In 2009, only AS units will be assessed.

From 2010, both AS units and A2 units will be assessed.

4.7 Assessment Objectives

There are three assessment objectives, AO1, AO2 and AO3.

Candidates are expected to demonstrate the following (in the context of the content described).

- **AO1 Demonstrate knowledge and understanding** of the content, concepts and processes;
- **AO2 Analyse, interpret and evaluate** geographical information, issues and view points and apply understanding in unfamiliar contexts;
- **AO3 Investigate, conclude and communicate:** select and use a variety of methods, skills and techniques (including the use of new technologies) to investigate questions and issues, reach conclusions and communicate findings.

AO weightings in AS GCE

Unit	% of AS GCE			Total (%)
	AO1	AO2	AO3	
AS Unit F761: <i>Managing Physical Environments</i>	25	10	15	50
AS Unit F762: <i>Managing Change in Human Environments</i>	25	10	15	50
	50	20	30	100

AO weightings in Advanced GCE

Unit	% of Advanced GCE			Total (%)
	AO1	AO2	AO3	
AS Unit F761: <i>Managing Physical Environments</i>	12.5	5	7.5	25
AS Unit F762: <i>Managing Change in Human Environments</i>	12.5	5	7.5	25
A2 Unit F763: <i>Global Issues</i>	10	15	5	30
A2 Unit F764: <i>Geographical Skills</i>	5	5	10	20
	40	30	30	100

4.8 Quality of Written Communication

Quality of written communication is met through all AOs and is assessed in all units. Credit may be restricted if communication is unclear.

Candidates should:

- ensure that text is legible and that spelling, punctuation and grammar are accurate so that meaning is clear;
- select and use a form and style of writing appropriate to its purpose and the complex subject matter;
- organise information clearly and coherently, using specialist vocabulary when appropriate.

This specification provides opportunities to assess the quality of written communication by:

- the use of extended writing tasks in all assessment units;
- expecting candidates to use specialist subject vocabulary throughout;
- the use of a variety of question types and wordings to encourage a variety of forms and styles of response.

5 Technical Information

5.1 Making Unit Entries

Please note that centres must be registered with OCR in order to make any entries, including estimated entries. It is recommended that centres apply to OCR to become a registered centre well in advance of making their first entries. Centres must have made an entry for a unit in order for OCR to supply the appropriate forms.

It is essential that unit entry codes (the four-figure alpha-numeric codes given in brackets at the end of the unit title) are quoted in all correspondence with OCR. See Sections 4.1 and 4.2 for these unit entry codes.

5.2 Making Qualification Entries

Candidates must enter for qualification certification separately from unit assessment(s). If a certification entry is **not** made, no overall grade can be awarded.

Candidates may enter for:

- AS GCE certification (entry code H083).
- Advanced GCE certification (entry code H483).

A candidate who has completed all the units required for the qualification may enter for certification either in the same examination series (within a specified period after publication of results) or in a later series.

AS GCE certification is available from June 2009.
Advanced GCE certification is available from June 2010.

5.3 Grading

All GCE units are awarded a-e. The Advanced Subsidiary GCE is awarded on the scale A-E. The Advanced GCE is awarded on the scale A-E with access to an A*. To be awarded an A*, candidates will need to achieve a grade A on their full A Level qualification and an A* on the aggregate of their A2 units. Grades are reported on certificates. Results for candidates who fail to achieve the minimum grade (E or e) will be recorded as *unclassified* (U or u) and this is **not** certificated.

A Uniform Mark Scale (UMS) enables comparison of candidates' performance across units and across series. The two-unit AS GCE has a total of 200 *uniform* marks and the four-unit Advanced GCE has a total of 400 *uniform* marks.

OCR converts the candidate's raw mark for each unit to a *uniform* mark. The maximum *uniform* mark for any unit depends on that unit's weighting in the specification. In these Geography specifications, the four units of the Advanced GCE specification have UMS weightings of 25% / 25% / 30% / 20% (and the **two** units of the AS GCE specification have UMS weightings of 50% and 50%). The *uniform* mark totals are 100/100/120/80 respectively. Each unit's raw mark grade boundary equates to the *uniform* mark boundary at the same grade. Intermediate marks are converted on a pro-rata basis.

Uniform marks correspond to *unit* grades as follows.

(Advanced GCE) Unit Weighting	Maximum Unit Uniform Mark	Unit Grade					u
		a	b	c	d	e	
30%	120	120–96	95–84	83–72	71–60	59–48	47–0
25%	100	100–80	79–70	69–60	59–50	49–40	39–0
20%	80	80–64	63–56	55–48	47–40	39–32	31–0

OCR adds together the unit *uniform* marks and compares these to pre-set boundaries (see the table below) to arrive at *qualification* grades.

Qualification	Qualification Grade					U
	A	B	C	D	E	
AS GCE	200–160	159–140	139–120	119–100	99–80	79–0
Advanced GCE	400–320	319–280	279–240	239–200	199–160	159–0

Candidates achieving at least 320 *uniform* marks in their Advanced GCE, ie grade A, and who also gain at least 180 *uniform* marks in their two A2 units will receive an A* grade.

5.4 Result Enquiries and Appeals

Under certain circumstances, a centre may wish to query the grade available to one or more candidates or to submit an appeal against an outcome of such an enquiry. Enquiries about unit results must be made immediately following the series in which the relevant unit was taken.

For procedures relating to enquires on results and appeals, centres should consult the OCR *Handbook for Centres* and the document *Enquiries about Results and Appeals: Information and Guidance for Centres* produced by the Joint Council. Copies of the most recent editions of these papers can be obtained from OCR.

5.5 Shelf-life of Units

Individual unit results, prior to certification of the qualification, have a shelf-life limited only by that of the qualification.

5.6 Unit and Qualification Re-sits

There is no restriction on the number of times a candidate may re-sit each unit before entering for certification for an AS GCE or Advanced GCE.

Candidates may enter for the full qualifications an unlimited number of times.

5.7 Guided Learning Hours

AS GCE Geography requires **180** guided learning hours in total.

Advanced GCE Geography requires **360** guided learning hours in total.

5.8 Code of Practice/Subject Criteria/Common Criteria Requirements

These specifications comply in all respects with the current *GCSE, GCE, GNVQ and AEA Code of Practice*, as available on the QCA website; the subject criteria for GCE Geography; and *The Statutory Regulation of External Qualifications 2004*.

5.9 Arrangements for Candidates with Particular Requirements

For candidates who are unable to complete the full assessment or whose performance may be adversely affected through no fault of their own, teachers should consult *Access Arrangements and Special Consideration Regulations and Guidance Relating to Candidates who are Eligible for Adjustments in Examinations*. In such cases, advice should be sought from OCR as early as possible during the course.

5.10 Prohibited Qualifications and Classification Code

Candidates who enter for the OCR GCE specifications may not also enter for any other GCE specification with the certification title *Geography* in the same examination series.

Every specification is assigned to a national classification code indicating the subject area to which it belongs.

Centres should be aware that candidates who enter for more than one GCE qualification with the same classification code will have only one grade (the highest) counted for the purpose of the School and College Achievement and Attainment Tables.

The classification code for these specifications is 3910.

6 Other Specification Issues

6.1 Overlap with other Qualifications

Geography by its very nature and its locational approach overlaps with many other subjects, but more specifically with the following.

Overlap with other qualifications

	Unit F761	Unit F762	Unit F763	Unit F764
GCE Biology			✓	✓
GCE Business Studies		✓	✓	✓
GCE Economics		✓	✓	
GCE Geology	✓		✓	
GCE Science	✓	✓	✓	
GCE Sociology			✓	✓
GCE Travel and Tourism		✓	✓	✓

6.2 Progression from these Qualifications

Throughout the course of study candidates are encouraged to develop a critical understanding of how the physical environment interacts with human activities to produce distinctive dynamic spatial patterns at a range of scales from very local to global.

The specifications therefore provide a suitable foundation for the study of geography or related courses in higher education. Equally they are suitable for candidates intending to pursue geography-based careers or careers in business, various social sciences and sciences, or as part of a course of general education.

6.3 Key Skills Mapping

These specifications provide opportunities for the development of the Key Skills of *Communication*, *Application of Number*, *Information Technology*, *Working with Others*, *Improving Own Learning and Performance* and *Problem Solving* at Levels 2 and/or 3. However, the extent to which this evidence fulfils the Key Skills criteria at these levels will be totally dependent on the style of teaching and learning adopted for each unit.

The following table indicates where opportunities *may* exist for at least some coverage of the various Key Skills criteria at Levels 2 and/or 3 for each unit.

Unit	C				AoN			IT			WwO			IOLP			PS		
	.1a	.1b	.2	.3	.1	.2	.3	.1	.2	.3	.1	.2	.3	.1	.2	.3	.1	.2	.3
F761	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					✓	✓	✓		
F762	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					✓	✓	✓		
F763	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓		
F764	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

6.4 Spiritual, Moral, Ethical, Social, Legislative, Economic and Cultural Issues

These specifications offer opportunities which can contribute to an understanding of these issues in the following topics.

In AS Unit F761 *Managing Physical Environments*, opportunities lie in the coverage of:

- conflicts in the use of drainage basins;
- the impact of, and the management of, flooding;
- planning and management of coastal environments;
- conflicts resulting from coastal management;
- how human factors make environments ecologically vulnerable;
- conflicts with indigenous populations when environments are developed;
- the ways that ensure sustainable development in fragile environments.

In AS Unit F762 *Managing Change in Human Environments* opportunities lie in the coverage of:

- factors influencing land-use patterns;
- social deprivation – its characteristics and causes;
- problems of managing the growth in demand for public services;
- management strategies used to help areas become increasingly sustainable;
- economic and social problems of rural decline;
- land degradation and pollution;

- factors influencing the pattern of energy supply;
- opportunities and problems created by energy exploitation;
- renewable energy sources;
- opportunities and problems created by the development of tourism;
- the development of sustainable tourism.

In A2 Unit F763: *Global Issues*, opportunities lie in the coverage of:

- the impact of, and reaction to, natural hazards;
- the effectiveness of managing natural hazards;
- human impact on the climate;
- human influences on ecosystems;
- conservation and environmental management;
- population growth and overpopulation;
- resource development and the factors influencing their development;
- the development continuum;
- development of sustainable resources;
- globalisation and its impacts;
- the development gap;
- the role of transnational corporations;
- international trade and aid;
- levels of development and quality of life;
- impact of economic inequalities on social and environmental issues;
- variations in the type and level of pollution;
- approaches to reducing inequalities including legal, economic and social.

A2 Unit F764: *Geographical Skills* is a skills unit requiring research and candidates may select topics that explore one or more of these issues.

6.5 Sustainable Development, Health and Safety Considerations and European Developments

These specifications support these issues, consistent with current EU agreements.

Sustainable development is a theme that underpins all units with the exception of A2 Unit F764: *Geographical Skills*.

Health and Safety is an important issue in A2 Unit F764: *Geographical Skills*.

European developments can exemplify various aspects of all units with the exception of A2 Unit F764: *Geographical Skills*, specifically in AS Unit F762: *Managing Change in Human Environments* and A2 Unit F763: *Global Issues*.

6.6 Avoidance of Bias

OCR has taken great care in the preparation of these specifications and assessment materials to avoid bias of any kind.

6.7 Language

These specifications and associated assessment materials are in English only.

6.8 Disability Discrimination Act Information Relating to these Specifications

AS/A Levels often require assessment of a broad range of competences. This is because they are general qualifications and, as such, prepare candidates for a wide range of occupations and higher level courses.

The revised AS/A Level qualification and subject criteria were reviewed to identify whether any of the competences required by the subject presented a potential barrier to any disabled candidates. If this was the case, the situation was reviewed again to ensure that such competences were included only where essential to the subject. The findings of this process were discussed with disability groups and with disabled people.

Reasonable adjustments are made for disabled candidates in order to enable them to access the assessments. For this reason, very few candidates will have a complete barrier to any part of the assessment. Information on reasonable adjustments is found in *Access Arrangements and Special Consideration: Regulations and Guidance Relating to Candidates who are Eligible for Adjustments in Examinations* produced by the Joint Council (refer to Section 5.9 of this specification).

Candidates who are still unable to access a significant part of the assessment, even after exploring all possibilities through reasonable adjustments, may still be able to receive an award. They would be given a grade on the parts of the assessment they have taken and there would be an indication on their certificate that not all of the competences have been addressed. This will be kept under review and may be amended in the future.

Requirements for fieldwork are sufficiently flexible for all candidates to participate.

Candidates with visual impairments may have difficulty in demonstrating skills related to analysis, interpretation and evaluation of geographical information including maps, 3-D and colour images.

Appendix A: Performance Descriptions

Performance descriptions have been created for all GCE subjects. They describe the learning outcomes and levels of attainment likely to be demonstrated by a representative candidate performing at the A/B and E/U boundaries for AS and A2.

In practice most candidates will show uneven profiles across the attainments listed, with strengths in some areas compensating in the award process for weaknesses or omissions elsewhere. Performance descriptions illustrate expectations at the A/B and E/U boundaries of the AS and A2 as a whole; they have not been written at unit level.

Grade A/B and E/U boundaries should be set using professional judgement. The judgement should reflect the quality of candidates' work, informed by the available technical and statistical evidence. Performance descriptions are designed to assist examiners in exercising their professional judgement. They should be interpreted and applied in the context of individual specifications and their associated units. However, performance descriptions are not designed to define the content of specifications and units.

The requirement for all AS and A level specifications to assess candidates' quality of written communication will be met through one or more of the assessment objectives.

The performance descriptions have been produced by the regulatory authorities in collaboration with the awarding bodies.

AS performance descriptions for geography

	Assessment objective 1	Assessment objective 2	Assessment objective 3
Assessment objectives	Demonstrate knowledge and understanding of the content, concepts and processes.	Analyse, interpret and evaluate geographical information, issues and viewpoints and apply understanding in unfamiliar contexts.	Select and use a variety of methods, skills and techniques (including the use of new technologies) to investigate questions and issues, reach conclusions and communicate findings.
A/B boundary performance descriptions	Candidates characteristically: a) demonstrate detailed knowledge and understanding of a range of concepts and processes b) demonstrate detailed knowledge and understanding of subject-specific material.	Candidates characteristically: a) analyse and interpret geographical information, issues and viewpoints b) offer a valid evaluation of geographical information, issues and viewpoints c) demonstrate the ability to apply geographical understanding to unfamiliar contexts at different scales.	Candidates characteristically: a) select and use appropriately a range of methods, skills and techniques (including new technologies) when investigating questions and issues b) reach valid conclusions and communicate findings clearly in a structured manner appropriate to the task.
E/U boundary performance descriptions	Candidates characteristically: a) demonstrate some knowledge and understanding of some concepts and processes b) show basic knowledge and understanding of subject-specific material.	Candidates characteristically: a) offer limited and inconsistent analysis and interpretation of geographical information, issues and viewpoints b) attempt some limited evaluation of geographical information, issues and viewpoints c) show some limited ability to apply aspects of geographical understanding to unfamiliar contexts.	Candidates characteristically: a) use a limited range of methods, skills and techniques (which may include new technologies) to attempt to investigate questions and issues b) draw some limited conclusions c) communicate findings which broadly address the tasks.

A2 performance descriptions for geography

	Assessment objective 1	Assessment objective 2	Assessment objective 3
Assessment objectives	Demonstrate knowledge and understanding of the content, concepts and processes.	Analyse, interpret and evaluate geographical information, issues and viewpoints and apply understanding in unfamiliar contexts.	Select and use a variety of methods, skills and techniques (including the use of new technologies) to investigate questions and issues, reach conclusions and communicate findings.
A/B boundary performance descriptions	<p>Candidates characteristically:</p> <ul style="list-style-type: none"> a) demonstrate knowledge and understanding of a wide range of concepts and processes b) show thorough knowledge and understanding of subject-specific material. 	<p>Candidates characteristically:</p> <ul style="list-style-type: none"> a) accurately and competently analyse and interpret geographical information, issues and viewpoints b) offer a thorough evaluation of geographical information, issues and viewpoints in relation to specific geographical concepts c) demonstrate the ability to apply accurate and appropriate geographical understanding to unfamiliar contexts with precision at a range of scales. 	<p>Candidates characteristically:</p> <ul style="list-style-type: none"> a) select and use appropriately and accurately a wide range of methods, skills and techniques (including new technologies) when thoroughly investigating questions and issues b) reach substantiated and valid conclusions c) communicate findings accurately and appropriately to the task.
E/U boundary performance descriptions	<p>Candidates characteristically:</p> <ul style="list-style-type: none"> a) demonstrate some knowledge and understanding of the main concepts and processes b) show some understanding of subject-specific material. 	<p>Candidates characteristically:</p> <ul style="list-style-type: none"> a) show some attempts to analyse and interpret geographical information, issues and viewpoints with varying degrees of success b) offer some evaluation of geographical information, issues and viewpoints with variable success c) show some ability to apply geographical understanding to unfamiliar contexts with some degree of accuracy. 	<p>Candidates characteristically:</p> <ul style="list-style-type: none"> a) use a range of methods, skills and techniques (which include new technologies) to investigate questions and issues with varying degrees of success. b) draw some straightforward conclusions c) communicate findings broadly appropriate to the task.