

Mark Scheme (Results) January 2008

GCE

GCE Geography B (6475/01)

6475 /01 Researching Global Futures (written paper)

Option 5.1 Environments and resources

Q1 Assess the link between economic development and resource exploitation

Generalisation 1

The focus of the Option is: How do resources affect economic development? What are the consequences of this? The development of a resource-based economic activity .Resource distribution varies spatially, and resource exploitation may act as a spur to economic activity at all scales: globally, nationally regionally and at a small scale. Similarly, the pattern of mineral and energy production and consumption is unequal, which has consequences for people everywhere.

Investigating how mineral/energy

- resources attract other activities or industries. The growth of resource-based industrial regions (eg the Ruhr), and the importance of minerals within one country, eg Chile.
- Identifying global production/consumption of both fossil and renewable energies; the 'south to north flow of energy resources, and the role of TNCs. The changing global energy situation, including LEDCs.

By examining a range of case studies for example economic development in UK /S Wales, the Germany/Ruhr, Zambia , Malaysia Alaska, N Sea, Bougainville, Siberia, Namibia,

Can choose to concentrate on mineral or energy exploitation... but show range within this

Differences in MEDC/NIC/LEDC approaches should feature

Lack of resources may hinder development

Better candidates will choose a range of scales as well as MEDC/NIC/LEDC split.

They may introduce models eg multiplier effect/cumulative causation.

They may introduce a time element and look at areas that have witnessed change in the relationship, eg deindustrialised areas or NICs/RICs

Conservation strategies may feature

Both direct and indirect effects(linkages) may be covered

They may use a wider range of case studies, possibly at a range of scales

<p>D Introducing, defining and describing the question, problem or issue, and identifying the data/information required to answer it</p>	<p>Definitions of:</p> <ul style="list-style-type: none"> resource(finite, recyclable, renewable) resource exploitation, either mineral or energy resources or both link- one/two ways: cause/ effect <p>Justification of case study selection by scale, time, location</p>
<p>R Researching relevant sources, selecting appropriate case study material and using this knowledge in detail</p>	<p>A balanced range of case studies by scale, location and possibly over time, showing detailed knowledge MEDC/LEDC/NIC locations should feature and be contrasted.</p>

<p style="text-align: center;">U</p> <p>Understanding of general concepts, case studies, attitudes and values, and the application of data and information to the question, problem or issue.</p>	<p>Understanding of the key ideas</p> <ul style="list-style-type: none"> • Economic development varies over time and space • Economic development is fuelled/spurred on by resource use of all types • As economic development progresses and consumerism increases, more resources are required- growth of 'footprint' <p>As economic development progresses more conservation may enter into use strategies</p>
<p style="text-align: center;">C</p> <p>Drawing appropriate conclusions on the basis of evidence, and on going evaluation</p>	<ul style="list-style-type: none"> • Should include a meaningful assessment of the title- complexity of relationship, not simply one way • Look for ongoing evaluations during essay • Should return to main case studies developed in the essay • Credit those who go beyond simplistic assertive viewpoint that development is linked to resource exploitation
<p style="text-align: center;">Q</p> <p>Quality of written communication, including the communication of knowledge, ideas and conclusions in a clear and logical order, and the use of appropriate vocabulary</p>	<p>As per generic mark scheme</p> <p>Specialist geographical terminology such as resource, stock, flow, recyclable, renewable.....</p>

Option 5.1 Environments & Resources

Q2 'High levels of resource consumption in MEDCs have global consequences'.

Discuss with reference to EITHER energy OR mineral resources

Generalisation 1

The focus of the Option is: How do resources affect economic development? What are the consequences of this? The development of a resource-based economic activity. Resource distribution varies spatially, and resource exploitation may act as a spur to economic activity at all scales: globally, nationally regionally and at a small scale. Similarly, the pattern of mineral and energy production and consumption is unequal, which has consequences for people everywhere.

Investigating how mineral/energy

- resources attract other activities or industries. The growth of resource-based industrial regions (eg the Ruhr), and the importance of minerals within one country, eg Chile.
- Identifying global production/consumption of both fossil and renewable energies; the 'north-south' flow of energy resources, and the role of TNCs. The changing global energy situation, including LEDCs.

By examining a range of case studies for either energy or minerals for example resource consumption/production in UK /S Wales, Germany/the Ruhr, , Zambia , Malaysia, Alaska, N Sea, Bougainville, Siberia, Namibia,

Unequal patterns lead to large scale transfers of materials eg of coal or copper. Consequences include environmental, economic, social.

Differences in MEDC/NIC/LEDC approaches should feature

Conservation strategies may feature

Better candidates will identify a range of consequences: environmental, economic and social. They will use a wider range of case studies, possibly at a range of scales.

<p style="text-align: center;">D</p> <p>Introducing, defining and describing the question, problem or issue, and identifying the data/information required to answer it</p>	<p>Definitions of</p> <ul style="list-style-type: none"> • Resource- finite, reserve, stock, renewable, alternatives • High levels consumption, ie use in a raw/processed state in large quantities • MEDCs, eg World Bank classification high/mid/lower income countries. May include NICs eg Brazil /RICs eg China • Global Consequences: long/short, direct/indirect. <p>Justification of case study selection from MEDCs and NICs/LEDCs perhaps categorised by scale(global-local) or over time, North-South flows</p>
<p style="text-align: center;">R</p> <p>Researching relevant sources, selecting appropriate case study material and using this knowledge in detail</p>	<p>A balanced range of case studies by scale, location , type of economic development and possibly over time, showing detailed knowledge of South-North flows Detailed knowledge of either one/more mineral or one/more energy resource</p>

<p style="text-align: center;">U</p> <p>Understanding of general concepts, case studies, attitudes and values, and the application of data and information to the question, problem or issue.</p>	<p>Understanding of the key ideas</p> <ul style="list-style-type: none"> • Linkage of how resource use produce economic/social/environmental consequences, • These may be positive (eg development, trickle down effect) or negative (eg pollution, environmental degradation, social costs) • How South-North flows produce these consequences
<p style="text-align: center;">C</p> <p>Drawing appropriate conclusions on the basis of evidence, and on going evaluation</p>	<ul style="list-style-type: none"> • Should include a meaningful assessment of the title • Should return to main case studies developed in the essay • Look for ongoing evaluations during essay • Credit those who go beyond simplistic assertive viewpoint that resource consumption is greatest in MEDCs by looking at countries like China
<p style="text-align: center;">Q</p> <p>Quality of written communication, including the communication of knowledge, ideas and conclusions in a clear and logical order, and the use of appropriate vocabulary</p>	<p>As per generic mark scheme</p> <p>Specialist geographical terminology such as resource , stock, flow, recyclable, renewable, technocentric</p>

Option 5.2 Living with hazardous environments

Q3 To what extent does the human geography of an area influence how societies manage the impact of natural hazards?

<p>Generalisation 3</p> <p>The focus of the Option is: How successfully do people respond to and attempt to manage the impact of natural hazards?</p> <p>Investigating how societies respond to hazards at a range of scales in both MEDCs and LEDCs - eg strategy 'do nothing', management, forecasting, and engineering. The different players - eg government, insurance, planners, civil defence, relief agencies. Different schemes at local and regional scales, in both MEDCs and LEDCs, designed to protect, alleviate and/or prevent hazards. People respond to natural hazards in different ways. Responses may</p> <ul style="list-style-type: none"> • be influenced by hazard type, frequency, magnitude, and location • include management of causes and/or effects, such as avoidance, education, protection and prevention schemes • depend on factors such as research, understanding of cause, frequency, location, and economic environment. <p>By examining a range of case studies from MEDCs /NICs/LEDCs and hazard types, candidates should explore the title. Human geography includes a range of social and economic factors. Other environmental factors should also be identified, eg reference to frequency and magnitude. Effective technology and planning may reduce the impact. Conversely techno centric fallacy may be present (as in USA!). It is possible to only consider one type of hazard, eg tectonic (earthquake, volcanoes, tsunamis)</p> <p>Better candidates will have a wider/more balanced range of hazard types and may investigate direct and indirect factors, long and short time scales. They may use Parks impact model as a framework &/or Kates perceptual model. They may refer to the IDNDR , the U.N. International Strategy for Disaster Reduction http://www.unisdr.org/</p> <p>THE FOCUS = RESPONSE/MANAGEMENT</p>	
<p>D</p> <p>Introducing, defining and describing the question, problem or issue, and identifying the data/information required to answer it</p>	<ul style="list-style-type: none"> • Definitions of Natural hazard (and secondary hazard may be attempted eg tsunami, fire) • Definition of societies • Definition of management types • Justification of case study selection for example by type of hazard, or type of response or economic development
<p>R</p> <p>Researching relevant sources, selecting appropriate case study material and using this knowledge in detail</p>	<p>A balanced range of case studies with knowledge of specifics/depth & range of selected & appropriate case studies which might include:</p> <ul style="list-style-type: none"> • the floods of the Mississippi and Boscastle, Galtir avalanches and Aberfan landslide, earthquakes of Kobe, and Bam, 2005 Asian e'quake, volcanoes of Mt St Helens and Pinatubo, The 2004 Asian Tsunami, Hurricanes Katrina, Wilma, Andrew, Mitch ... • Newer, topical or less standard case studies showing obvious personal research should be rewarded EG Cyclone Sidr 2007, Yr of floods, = wildfires California

<p style="text-align: center;">U</p> <p>Understanding of general concepts, case studies, attitudes and values, and the application of data and information to the question, problem or issue.</p>	<p>Understanding of the key ideas</p> <ul style="list-style-type: none"> • Complex inter-linkage of factors • Different types of response (protect, alleviate and/or prevent)from different groups- international to local • Role of time scale, possibly using Parks model • THE FOCUS = RESPONSE/MANAGEMENT •
<p style="text-align: center;">C</p> <p>Drawing appropriate conclusions on the basis of evidence, and on going evaluation</p>	<ul style="list-style-type: none"> • Should include a meaningful assessment of the title • Should return to main case studies developed in the essay • Look for ongoing evaluations during essay • Credit those who go beyond simplistic assertive viewpoint that 'human geography is very important'
<p style="text-align: center;">Q</p> <p>Quality of written communication, including the communication of knowledge, ideas and conclusions in a clear and logical order, and the use of appropriate vocabulary</p>	<p>As per generic mark scheme</p> <p>Specialist geographical terminology (depending on type of hazards chosen)such as quasi natural, tectonic, global warming, mass movement, hazard salience, techno centric</p>

Option 5.2 Living with hazardous environments

Q4 'Frequency and magnitude are critical to how people respond to natural hazard events' Discuss.

<p>Generalisation 3</p> <p>The focus of the Option is: How successfully do people respond to and attempt to manage the impact of natural hazards? Investigating how societies respond to hazards at a range of scales in both MEDCs and LEDCs - eg strategy 'do nothing', management, forecasting, and engineering. The different players - eg government, insurance, planners, civil defence, relief agencies. Different schemes at local and regional scales, in both MEDCs and LEDCs, designed to protect, alleviate and/or prevent hazards. People respond to natural hazards in different ways. Responses may</p> <ul style="list-style-type: none"> • be influenced by hazard type, frequency, magnitude, and location • include management of causes and/or effects, such as avoidance, education, protection and prevention schemes • depend on factors such as research, understanding of cause, frequency, location, and economic environment. <p>The essay is concerned with primarily the different groups of people/individuals involved in hazard management linked with the physical magnitude and frequency of a hazard. There is no restriction on the type of hazard- indeed a broad spectrum is needed to explore the title fully.</p> <p>By examining a range of case studies from MEDCs /NICs /LEDCs, incorporating different groups of people and hazard types, candidates should explore the title. A decision is needed by the end of the essay as to the amount of truth in the phrase, ie 'critical' Better candidates may identify: factors other than frequency and magnitude, eg economic development, perception, technology. They will identify a wide range of groups, not just different economic development groupings. They may use Parks model of impact or models of response.</p>	
<p>D</p> <p>Introducing, defining and describing the question, problem or issue, and identifying the data/information required to answer it</p>	<ul style="list-style-type: none"> • Definitions of: hazard(+ possibly secondary), frequency, magnitude • Definition/consideration of the term critical (although this may become apparent later in essay) • Definition/introduction to people, possibly 'groups' of people- governments, NGOs, individuals ... • Justification of case study selection for example by type of hazard, or type of response or economic development or type of frequency/magnitude
<p>R</p> <p>Researching relevant sources, selecting appropriate case study material and using this knowledge in detail</p>	<p>A balanced range of case studies with knowledge of specifics/depth of selected & appropriate case studies, which might include:</p> <ul style="list-style-type: none"> • The traditional approach using the floods of the Mississippi and Boscastle , Galtur avalanches and Aberfan landslide, earthquakes of Kobe, and Bam,2005 Asian; volcanoes of Mt St Helens and Pinatubo, the 2004 Asian Tsunami, Hurricanes Katrina, Wilma, Andrew, Mitch & Charlie..... • Newer, topical or less standard case studies showing obvious personal research should be rewarded eg Cyclone Sidr, 2007/8 floods, wildfires • Structure may be by group of people involved rather than type of hazard/incident

<p style="text-align: center;">U</p> <p>Understanding of general concepts, case studies, attitudes and values, and the application of data and information to the question, problem or issue.</p>	<p>Understanding of the key ideas</p> <ul style="list-style-type: none"> • Complex relationship between factors of frequency and magnitude and response- undoubtedly important but not always critical if finances, technology and effective governance available • Other factors involved- perception, economic development.... • Different groups have different responses spatially and temporally. • FOCUS= RESPONSE/MANAGEMENT
<p style="text-align: center;">C</p> <p>Drawing appropriate conclusions on the basis of evidence, and on going evaluation</p>	<ul style="list-style-type: none"> • Should include a meaningful assessment of the title • Should return to main case studies developed in the essay • Look for ongoing evaluations during essay • Credit those who go beyond simplistic assertive viewpoint that frequency and magnitude are critical, and that other factors such as economic development, government response etc may be 'critical' too.
<p style="text-align: center;">Q</p> <p>Quality of written communication, including the communication of knowledge, ideas and conclusions in a clear and logical order, and the use of appropriate vocabulary</p>	<p>As per generic mark scheme</p> <p>Specialist geographical terminology such as Mercalli, Richter scales quasi natural , prediction and (depending on type of hazards chosen), tectonic, troposphere, global warming, mass movement.....</p>

Option 5.3 The pollution of natural environments

Q5 Evaluate the effectiveness of international management strategies designed to reduce pollution.

Generalisation 4

The focus of the Option is:

Several alternative strategies exist by which pollution might be dealt with in the future; each has different merits and problems, and may have different social, economic, political and environmental consequences.

What are the alternative strategies for managing pollution in the future?

What are the social, economic, and environmental consequences of each of these strategies

- Exploring the meaning and implications of policies aimed at reducing pollution, penalising polluters, eg 'polluter pays'.
- Evaluating alternative strategies towards the management of pollution, including alternative lifestyles (recycling, reduced dependency on private transport).
- Assessing the role of governments in establishing national/international laws eg Kyoto Summit.

The essay is concerned with how successful management has been at a trans country level- regionally to globally. Traditional management focused on diffusion and to some extent polluter pays. Alternative strategies focussing on lifestyles: conservation, reduction, recycling, reusing, renewable resources have been adopted at increasingly international scales with 1992 and 2002 Earth Summits, Millennium Development Goals and a phalanx of Protocols(including Montreal and Kyoto) and standing conferences including 2005 G8 Summit on climate change in UK. How effective these are depends on application at a national to local scale! By examining a range of types of pollution, case studies and strategies relating to them eg Co2 and global warming-U.N. IPCC, 1997 Kyoto Protocol, G8 Gleneagles 2005, Ozone depletion -1987 Montreal Protocol Acid rain -1985 Sulphur Protocol,1999 Gothenburg Protocol Marine: MARPOL-from International Maritime Organisation, North Sea Conferences Toxic waste -1989 Basel Convention POPs- Agenda 21 Water-EU Water Framework Directive

The usual case studies of eg Bhopal, Chernobyl, Exxon Valdez , North Sea, or newer ones of Buncefield and Harbin should be framed within the international strategy which is relevant- or not. An attempt at traditional and alternative strategies should be made with reference to the concept of sustainability.

Better candidates will look at a range of successful/unsuccessful policies, and try to evaluate them. They may look at regional/transboundary agreements eg N Sea Conferences and really global policies eg Agenda 21 and Millennium Development Goals(Goal 7: Ensure environmental sustainability Target 9: Include the principles of sustainable development in policies and reverse the loss of environmental resources))They may go beyond international agreements and consider local initiatives eg in Curitiba, which did not use international strategies for its successful management of pollution .They may distinguish between point or diffuse sources and whether the pollution is accidental or operational. Simple models may be used ,eg based on the UK Environmental Agency model of pollution prevention, or the source-pathway sink concept.

<p>D Introducing, defining and describing the question, problem or issue, and identifying the data/information required to answer it</p>	<p>Definitions of international agreement, sustainable(Brundland Principles) Consideration of 'effective', which may be developed later in essay. Justification of case study selection eg to show that pollution may be tackled at source, pathway or sink, over different time and spatial scales. International agreements may be relatively successful eg CFC controls, acid rain, N Sea Conferences; EU directives or relatively unsuccessful(eg Kyoto) The essay may also be structured by using classification of pollution locations): atmospheric/terrestrial/water types or diffuse and point.</p>
<p>R Researching relevant sources, selecting appropriate case study material and using this knowledge in detail</p>	<p>A balanced range of case studies with knowledge of specifics/depth & range of selected & appropriate case studies which might include:</p> <ul style="list-style-type: none"> • Traditional case studies:Montreal and Kyoto Protocols, North Sea, . • Credit obvious personal & topical research eg on latest international efforts on global warming & post Kyoto (Bali 'roadmap'!)or latest stewardship schemes in European agriculture. • Any case study should be linked to international strategies
<p>U Understanding of general concepts, case studies, attitudes and values, and the application of data and information to the question, problem or issue.</p>	<p>Understanding of the key ideas</p> <ul style="list-style-type: none"> • Think global, act local-Local Agenda 21, Agenda 21, • Brundtland Principles-Sustainability eg carrying capacity • Growth of international agreements as pollution became more international in 21stC. • Role of pressure groups eg Greenpeace • Traditional and alternative forms of management
<p>C Drawing appropriate conclusions on the basis of evidence, and on going evaluation</p>	<ul style="list-style-type: none"> • Should include a meaningful assessment of the title • Should return to main case studies developed in the essay • Look for ongoing evaluations during essay • Credit those who go beyond simplistic assertive viewpoint international agreements are all ineffective or effective.
<p>Q Quality of written communication, including the communication of knowledge, ideas and conclusions in a clear and logical order, and the use of appropriate vocabulary</p>	<p>As per generic mark scheme Specialist geographical terminology such as diffuse, point, incidents, GDP/GNP/GNI..... proximity, precautionary, polluter pays principles</p>

Option 5.3 The pollution of natural environments

Q6 'Think globally, act locally' To what extent is this a realistic strategy for pollution management in order to achieve a sustainable future?

Generalisation 4

The focus of the Option is Several alternative strategies exist by which pollution might be dealt with in the future; each has different merits and problems, and may have different social, economic, political and environmental consequences.

What are the alternative strategies for managing pollution in the future?

What are the social, economic, and environmental consequences of each of these strategies

- Exploring the meaning and implications of policies aimed at reducing pollution, penalising polluters, eg 'polluter pays'.
- Evaluating alternative strategies towards the management of pollution, including alternative lifestyles (recycling, reduced dependency on private transport).
- Assessing the role of governments in establishing national/international laws eg Kyoto Summit.

The essay is concerned with the scales of pollution management: global to local and how these help achieve the goal of sustainable development. The consequences of alternative 'sustainable' management(eg conservation, renewables) may be social and economic and environmental, with many negative impacts (eg costs to industry, global shift) By examining a range of case studies at differing scales Eg at International scale:

Co2 and global warming-U.N. IPCC, 1997 Kyoto Protocol, G8 Gleneagles 2005

Ozone depletion -1987 Montreal Protocol

Acid rain -1985 Sulphur Protocol,1999 Gothenburg Protocol

Marine: MARPOL-from International Maritime Organisation, North Sea Conferences

Toxic waste -1989 Basel Convention

POPs- Agenda 21

Water-EU Water Framework Directive

The usual case studies of eg Bhopal(regional), Chernobyl & North Sea, (international), Exxon Valdez (local), or newer localised ones of Buncefield and Harbin should be framed within the international strategy which is relevant- or not. An attempt at traditional and alternative strategies should be made with reference to the concept of sustainability.

Better candidates will examine a larger range of scales/locations and link these specifically to sustainable futures. They may consider the term 'realistically' by evaluating the strategies used: eg for nuclear waste, global warming, POPs,refuse.....They should provide the framework for the Q- ie Brundtland, Earth Summits

<p>D Introducing, defining and describing the question, problem or issue, and identifying the data/information required to answer it</p>	<p>Definitions of pollution, origin of Local Agenda 21 from 1992 Earth Summit, Definition of sustainable future (Brundland Principle) Justification of case study selection to show that not just local initiatives are needed but international agreements as pollution becomes ever increasingly trans boundary. (ie by spatial scale) The essay may also be structured by using classifications: diffuse and point, atmosphere/terrestrial/water.</p>
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<p>R Researching relevant sources, selecting appropriate case study material and using this knowledge in detail</p>	<p>A balanced range of case studies with knowledge of specifics/depth & range of selected & appropriate case studies which might include:</p> <ul style="list-style-type: none"> • Traditional case studies: Kyoto, Montreal, North Sea, but with anomalies such as Curitiba and successful local recycling initiatives eg Project Integra of Hampshire, may feature. • If the USA is used for global warming, individual efforts by eg California or Chattanooga to reduce greenhouse gas emissions may be contrasted with the Bush administration policy on Kyoto. • Credit obvious personal & topical research eg on global warming & post Kyoto and Bali 2007 (Roadmap) or latest stewardship schemes in European agriculture linked to reduced water pollution. Credit reference to Earth Summits, Local Agenda 21, Millennium Development Goals (goal 8)
<p>U Understanding of general concepts, case studies, attitudes and values, and the application of data and information to the question, problem or issue.</p>	<p>Understanding of the key ideas</p> <ul style="list-style-type: none"> • scales of pollution management: global to local and how these help achieve the goal of sustainable development. • The consequences of alternative 'sustainable' management(eg conservation, renewables) may be social and economic and environmental, with many negative impacts (eg costs to industry, global shift)
<p>C Drawing appropriate conclusions on the basis of evidence, and on going evaluation</p>	<ul style="list-style-type: none"> • Should include a meaningful assessment of the title • Should return to main case studies developed in the essay • Look for ongoing evaluations during essay • Credit those who go beyond simplistic assertive viewpoint that there the statement is correct!
<p>Q Quality of written communication, including the communication of knowledge, ideas and conclusions in a clear and logical order, and the use of appropriate vocabulary</p>	<p>As per generic mark scheme Specialist geographical terminology such as diffuse, point, incidents, GDP/GNP/GNI.....proximity, precautionary, polluter pays principles</p>

Option 5.4 Wilderness Environments

Q7 Explain why both the physical and human environments of wilderness areas are worthy of protection

<p>Generalisation 1 The focus of the option is:</p> <ul style="list-style-type: none"> • What is the significance of wilderness regions? To what extent do these areas present features that are worth protecting? Identifying current rates of destruction of wilderness areas, eg Indonesian forests; to what extent might these represent features worth protecting and why? Whose values systems might promote their protection, or their destruction? • Identifying physical significance and ecological value of some wilderness areas - eg glaciated landscapes, Antarctic ice caps, hot desert terrains and ecology. • Identifying indigenous lifestyles in wilderness areas; assessing their value. . • Wilderness environments contain landforms and ecosystems of outstanding global importance, and sometimes unique indigenous lifestyles. Such features may be fragile and be vulnerable to exploitation and, possibly, irreparable damage. <p>The essay is concerned with the reasons for fragility and need for protection for both 'natural' and human environments(ie indigenous people within a wilderness) By examining a range of case studies: eg Antarctica where permanent residents are deliberately excluded to the other end of the wilderness continuum: eg Cairngorms. Better candidates may use different scales, and consider why different groups of people- inside and outside a wilderness area think it worthy of protection. They may include indigenous people as landscape 'stewards'. They may contrast wildernesses in MEDCs and LEDCs / NICs. They may introduce a time element, and show the increasing global significance placed on wilderness areas as in the 20th C</p>	
<p>D Introducing, defining and describing the question, problem or issue, and identifying the data/information required to answer it</p>	<p>Definitions of physical and human wilderness quality, role of pressures, protection measures and the concept of the value judgement of 'worthy'- although this may be developed later in essay Justification of case study selection to show a range of wildernesses Alternatively justification may be by scale or preferably reason(physical/human)</p>
<p>R Researching relevant sources, selecting appropriate case study material and using this knowledge in detail</p>	<p>A balanced range of case studies with knowledge of specifics/depth & range of selected & appropriate case studies which might include:</p> <ul style="list-style-type: none"> • Antarctica as the largest wilderness with unique international moratorium on development and a management strategy which although not easy to originally set up has lasted so far • Kakadu, active involvement of indigenous people as 'stewards' + MEDC status so financial stability-human + physical reasons for protection • Alaska, not easy to manage because of increasing pressures for minerals, and a variety of conservation areas like Denali designed to protect fragile ecosystems.

<p style="text-align: center;">U</p> <p>Understanding of general concepts, case studies, attitudes and values, and the application of data and information to the question, problem or issue.</p>	<p>Understanding of the key ideas</p> <ul style="list-style-type: none"> • Concept of fragility and ease of disturbance/destruction • Consideration of physical(natural- ecosystems, hydrology...)and human environments • Role of international concern over loss of Biodiversity- Earth Summits, Agenda 21, Biosphere Reserves, Millennium Development Goals + recently global warming impacts. • Role of more localised concern over loss of wildernesses especially to local communities • Some wildernesses may need human exclusion(Antarctica, Korup core zone)
<p style="text-align: center;">C</p> <p>Drawing appropriate conclusions on the basis of evidence, and on going evaluation</p>	<ul style="list-style-type: none"> • Should include a meaningful assessment of the title • Should return to main case studies developed in the essay • Look for ongoing evaluations during essay • Credit those who go beyond simplistic viewpoint that both environments are worthy of preservation, and humans may need to be excluded (eg in Korup core zone)
<p style="text-align: center;">Q</p> <p>Quality of written communication, including the communication of knowledge, ideas and conclusions in a clear and logical order, and the use of appropriate vocabulary</p>	<p>As per generic mark scheme</p> <p>Specialist geographical terminology such as fragility, wilderness continuum, carrying capacity, core-buffer zoning, Biosphere reserves.....</p>

Option 5.4 Wilderness Environments

Q8 'Wilderness areas have many features which are worth protecting' Explain why different groups of people may have contrasting views about this statement.

Generalisation 1

The focus of the option is:

- What is the significance of wilderness regions? To what extent do these areas present features that are worth protecting? Identifying current rates of destruction of wilderness areas, eg Indonesian forests; to what extent might these represent features worth protecting and why? Whose values systems might promote their protection, or their destruction?
- Identifying physical significance and ecological value of some wilderness areas - eg glaciated landscapes, Antarctic ice caps, hot desert terrains and ecology.
- Identifying indigenous lifestyles in wilderness areas; assessing their value. .
- Wilderness environments contain landforms and ecosystems of outstanding global importance, and sometimes unique indigenous lifestyles. Such features may be fragile and be vulnerable to exploitation and, possibly, irreparable damage.

The essay is concerned with the different groups of people involved in preserving or exploiting wilderness areas. Governments, international organisations(U.N., TNCs, NGOs ranging from Greenpeace to the Sierra Club to the Maasai of Ngorongoro in Tanzania)) locals will all have views on their own or other countries wildernesses. These may contrast and often conflict. The **fragility** of wildernesses makes them especially vulnerable to human induced change and exploitation.

By examining a range of case studies: eg Antarctica where permanent residents are deliberately excluded to the other end of the wilderness continuum: eg Cairngorms.

Better candidates may use different scales, and consider why different groups of people- inside and outside a wilderness area think it worthy of protection. They may include indigenous people as landscape 'stewards'. They may contrast wildernesses in MEDCs and LEDCs / NICs. They may introduce a time element, and show the increasing global significance placed on wilderness areas as in the 20th C

<p>D Introducing, defining and describing the question, problem or issue, and identifying the data/information required to answer it</p>	<p>Definitions of wilderness, features(hopefullyfragility), different groups of people(although the later may be developed later in essay), what contrasting viewpoints may be. Justification of case study selection to show a range of wildernesses by scale, economic development, value of ecology Alternatively justification may be by groups of people eg governments, NGOs, TNCs, locals or their different viewpoints</p>
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<p>R Researching relevant sources, selecting appropriate case study material and using this knowledge in detail</p>	<p>A balanced range of case studies with knowledge of specifics/depth & range of selected & appropriate case studies which might include:</p> <ul style="list-style-type: none"> • Antarctica as the largest wilderness with unique international moratorium on development and a management strategy which although not easy to originally set up has lasted so far to safeguard fragility • Kakadu, active involvement of indigenous people + MEDC status so financial stability • Alaska, not easy to manage because of increasing pressures for minerals, and a variety of conservation areas like Denali. • Ngorongoro Conservation Area, Tanzania where some local Maasai conflict with government imposed protection status
<p>U Understanding of general concepts, case studies, attitudes and values, and the application of data and information to the question, problem or issue.</p>	<p>Understanding of the key ideas</p> <ul style="list-style-type: none"> • Concept of fragility • Need for protection as human influences/footprints extend globally • Differing groups of people may hold differing views on wildernesses: continuum from preservation to destruction
<p>C Drawing appropriate conclusions on the basis of evidence, and on going evaluation</p>	<ul style="list-style-type: none"> • Should include a meaningful assessment of the title • Should return to main case studies developed in the essay • Look for ongoing evaluations during essay • Credit those who go beyond simplistic viewpoint that all wilderness areas are so fragile no human usage is feasible- it is if 'sustainable management' invoked and local communities involved..
<p>Q Quality of written communication, including the communication of knowledge, ideas and conclusions in a clear and logical order, and the use of appropriate vocabulary</p>	<p>As per generic mark scheme Specialist geographical terminology such as fragility, wilderness continuum, carrying capacity, core-buffer zoning, Biosphere reserves.....</p>