OCR
Oxford Cambridge and RSA

GCE

Geography

Unit **F763:** Global Issues

Advanced GCE

Mark Scheme for June 2017

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All examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the report on the examination.

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Abbreviations, annotations and conventions used in the detailed Mark Scheme:

Annotation	Meaning
	Unclear
^	Omission mark
I	Issue identified (Section A)
S	Strategy identified (Section A)
IRRL	Irrelevant, a significant amount of material that does not answer the question
L1	Level one
L2	Level two
L3	Level three
NE	No examples
R	Rubric infringement
	Highlighting an issue e.g. irrelevant paragraph. Use in conjunction with another stamp e.g. IRRL or ^
SEEN	Point has been seen and noted

MARK SCHEME

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th><th>Guidance</th></tr>
<tr>
<td>Questions 1 - 6</td>
<td>Candidates should receive credit for a particular issue identified in the resource or a broader generic issue. However, this latter issue must originate from the resource, such as secondary impacts of hazards. Strategies must be appropriate to the particular issue identified for Levels 2 and 3.

Balance between issue and strategies – given that ONE issue is required but STRATEGIES are to be included, most responses can be expected to have a balance of about quarter / three quarters issue / strategies.

The inclusion of only ONE strategy will not reach Level 3 and is unlikely to go beyond bottom of Level 2.

But this can not be prescriptive as the precise balance is likely to vary.
Some responses will inter-mix issue and strategies, meaning that the response must be read carefully to disentangle the two. If communication is clear then this will help inform the Level.

Annotate in the margin as follows;

<table>
<tr><td>I</td><td>for issue</td></tr>
<tr><td>S</td><td>for each strategy</td></tr>
</table>
</td>
<td></td>
<td>For each question in Section A:

AO1 Knowledge and understanding accounts for 4 marks
AO2 Analysis, interpretation and evaluation accounts for 4 marks
AO3 Investigate, conclude and communicate accounts for 2 marks

Level 3 (9 – 10 marks)
Substantial knowledge and authoritative understanding of an appropriate issue which must originate from the resource and using clear evidence from the resource. Clear application of relevant knowledge and understanding to the question set.
Clear structure and organisation. Communication is clear with maps, diagrams, and statistics, if appropriate. Accurate use of geographical terms.

Level 2 (5 – 8 marks)
Sound knowledge and understanding of an appropriate issue using some evidence from the resource.
Sound application of relevant knowledge and understanding to the question set.
Sound structure and organisation. Communication is generally effective with maps, diagrams, and statistics, if appropriate. Geographical terms are mainly used effectively.

Level 1 (0 – 4 marks)
Poor knowledge and understanding of an appropriate issue using little or no evidence from the resource. Limited application of relevant knowledge and understanding to the question set.
Poor structure and organisation. Much inaccuracy in communication and limited and / or ineffective use of geographical terms.</td>
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Question	Answer	Marks	Guidance
1	**Earth Hazards** Study Fig.1, which shows a hazard profile diagram of a major volcanic eruption at a destructive plate boundary **Indicative Content** One of the Questions for Investigation in this Option is 'Volcanic eruptions are caused by plate tectonics and bring distinctive impacts to an area and these vary from place to pace.' Regarding the impacts candidates are expected to have considered that eruptions have '… a range of environmental and social impacts on the areas affected, which create a range of human responses to the hazard.' For L2+ responses need to pick up on the content of the diagram e.g. relatively high magnitude or it affects quite a large area which would relate to the ash ejected. Possible geographical issues include: • High magnitude leading to primary impacts – lava flows; ash falls; pyroclastic flows; lahars + poisonous gases • Duration and areal extent has implications for human activities e.g. agriculture, settlement, transport e.g. effect on air traffic; loss of crops and livestock • Possible L3 indicator relates to the exact spatial predictability of source of eruption but not the areal extent of the ash for example. • Rare frequency raises the issue, should people live in hazardous zones? This may indicate a Level 2+ response. • Positive issue – fertile soils; tourism • Causes of volcanic activity e.g. destructive plate boundary; island arc Possible management strategies: • Monitoring e.g. of seismic activity + gas emissions + prediction of volcanic eruptions – can be related to the very predictable location of the site of the eruption and speed of onset • Education of local population • Evacuation and then coping with refugees • Land-use zoning around volcano based on hazard mapping • Diversion of lava flows; stopping lava flows e.g., spraying with water • Diversion of flights to avoid ash cloud	**10**	The issue identified can be either purely physical or human. Clearly the two sets of factors interact and so candidates have no shortage of material to draw from. If candidate answers in terms of 'earthquake' – no marks for the issue. Credit strategies up to a max of 6 marks.

	Where if both long- and short-term responses included likely to indicate top of Level 2+ response.		

Question	Answer	Marks	Guidance
2	**Ecosystems and environments under threat** Study Fig. 2, an extract about ecosystems and environments under threat. One of the Key Ideas in this Option is 'When human activity impacts of physical environments they may need to be managed in order to be sustainable.' The text introduces the idea that as a consequence of human activity, ecosystems and environments may lose their natural stability and require management if they are to recover and regain their stability. The extract is deliberately not set in a particular spatial context as candidates will have investigated a wide range of exemplars. Candidates can therefore select from their examples the issues and appropriate strategies to use in their responses. **Indicative Content** Possible geographical issues include: • The threats posed by human activities to any components in the physical environment • When might the tipping point occur? • How severe might the instability be arising from crossing the tipping point? • The balance between economic and social demands such as food production, employment, health protection and environmental protection and conservation. • How protected should environments be? • Comments about these issues in terms of both intended and unintended ways a possible L2+ indicator. Possible management strategies: • From complete protection at one end of the spectrum through various levels of protection in order to manage sustainably. • Measures might be conservation, especially in the context of the impacts on elements in ecosystems such as individual species e.g. orang-utan in SE Asia or Arabian oryx • Measures might be planning controls such as operate in national parks, marine	**10**	The issue identified can be either purely physical or human. Clearly the two sets of factors interact and so candidates have no shortage of material to draw from.

	conservation zones or SSSIs. • Measures might range from trans-national strategies such as CITES agreement through to local government planning control on a greenfield site		

Question	Answer	Marks	Guidance
3	**Climatic Hazards** Study Fig. 3 which shows heavy snowfall in north-west London, 2010. **Indicative Content** One of the Questions for Investigation in this Option is 'How do atmospheric systems cause heavy snowfalls and in what ways do they represent a hazard to people.' Candidates are expected to have studied both the formation of heavy snowfall and the range of hazards this represents to people through blizzards and cold spells. Possible geographical issues include: • Impacts on human activities – economic and social dislocation; transport disruption • Impacts on individuals e.g. deaths and injuries • Impacts affect poor disproportionally more e.g. comments about fuel poverty appropriate; impacts on elderly also especially acute • Causes of heavy snowfalls / blizzards e.g. intense depression; moisture laden cold air mass Possible management strategies: • Forecasting – variety of measures e.g. geostationary satellites, radar. • Long term strategies e.g. governments and NGOs prepare e.g. emergency supplies stock-piled; emergency services trained and equipped; • Short term strategies e.g. warnings; closing of transport routes; closing of businesses, schools etc.; gritting of roads + pavements; medical services gear up for increase in admissions; power generation capability increased to cope with additional demand Where both long- and short-term responses included likely to indicate top of Level 2+ response.	10	The issue identified can be either purely physical or human. Clearly the two sets of factors interact and so candidates have no shortage of material to draw from.

Question	Answer	Marks	Guidance
4	**Population and resources** Study Fig. 4 which shows population growth rates for three groups of countries, 2000 - 2050 **Indicative Content** One of the Questions for Investigation in this Option is 'How and why does the number and rate of growth of population vary over time and space?' The associated Key Idea states that '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 graph shows how the population growth rates for three groups of countries have been changing and are projected to change through to 2050. Possible geographical issues include: • Population-resource balance issues in terms of population growth in two groups of countries possibly placing a strain on resources e.g. food, clean water, housing, employment, education, health care • Population-resource balance issues in terms of contrast between LEDCs and NICs with the latter perhaps being in a more secure situation • Population-resource balance issues in terms of population stagnation and an ageing population placing a strain on resources e.g. medical care; pension provision; declining workforce numbers; housing Possible management strategies: • Population strategies to reduce growth in some places • Changes to population strategies to increase growth e.g. China's relaxation of their policy • Investment in LEDCs and NICs in education and training to improve prospects for youth • Pro-natalist policies in MEDCs e.g. financial incentives such as tax breaks, subsidised	**10**	Candidates can deal with an issue and management strategies in a generic way e.g. trends, or they can use a particular example (s) from one of the groups (MEDCs, NICs, LEDCs) to illustrate an issue and strategies. However, a focus on just one point in time for one category of country is too narrow. The resource is clearly highlighting trends.

	child care, paid maternity and paternity leave • Investment in health care, housing for elderly • Management of migration flows e.g. to allow inward flows of skilled migrants to supplement workforce in MEDCs		

Question	Answer	Marks	Guidance
5	**Globalisation** Study Fig.5, a cartoon about the impacts of the USA's membership of the North American Free Trade Agreement (NAFTA). One of the Key Ideas in this Option is that 'Globalisation of economic activity may bring advantages and disadvantages to various areas. These impacts may be environmental, economic, social or political.' The cartoon focuses on the disadvantages some people in the USA feel about NAFTA. Candidates are not expected to have studied NAFTA per se but will have considered a range of factors responsible for globalisation which includes free trade and outsourcing for example. NAFTA does not allow free movement of labour so migration is not an issue. The cartoon includes no references to migration – see the slogans on the placards. **Indicative Content** Possible geographical issues include: • Loss of employment, especially manufacturing, due to jobs migrating to lower cost areas – 'We want our jobs back!' • Wages kept low due to competition from lower cost producers – 'Why should we have to compete with Third World wages?!!' • Pressure to reduce or highly control free trade – 'We need to reinstate tariffs!' • Consumers might disagree with message of cartoon as they benefit from free trade via cheaper goods and services (outsourcing) – sets up tension within a country Possible management:	**10**	Issue and strategies should be related to the impacts of globalisation on a MEDC (USA) which is clearly highlighted in the resource.

	• Terms of agreements need careful negotiation • Increased training of workforce made unemployed by migration of jobs • Focus on comparative advantage of MEDC countries such as USA in high end manufacturing e.g. aerospace; bioengineering • Focus on service industries to replace loss of manufacturing employment		

Question	Answer	Marks	Guidance
6	**Development and inequalities** Study Fig.6, which shows global patterns of extreme poverty 1990, 2000 and 2015. One of the Key Questions for Investigation in this Option is 'To what extent is the 'Development Gap' increasing or decreasing?' The associated Key idea states that '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. The graph shows changes in the % of the global population living in extreme poverty by major world region. **Indicative Content** Possible geographical issues include: • Global inequalities have been increasing and some regions, e.g. sub-Saharan Africa, are finding it very difficult to decrease the level of extreme poverty. • Any of the factors (physical, economic, social or political) which might be influencing this pattern. • Responses could compare the changes to the levels of extreme poverty amongst the groups or focus on just one. Possible management strategies: • Sharper focus on development aid / projects which can lead to sustainable development. • Role of trans-national governments / organisations e.g. UN, World Bank, IMF, EU and	10	Issues and strategies should reflect the contrasts in economic development and inequalities highlighted in the resource.

	individual governments. • Role of NGOs appropriate e.g. Christian Aid, Oxfam, Save the Children. • Comments that relate explicitly to raising income levels e.g. fair trade for small scale farmers, education and improvements in the role and status of women in Sub-Sharan Africa might indicate top of L2+ response.		

Question	Answer	Marks	Guidance
7	***'In the 21st century, it is increasingly possible to manage the impacts of earth hazards.' Discuss.*** Two of the Questions for Investigation are **'Why do the impacts on human activity of [earth] hazards vary over time and location?**' and **'How can hazards be managed to reduce their impacts?**' This question allows candidates to draw any and all of the earth hazards they will have investigated. The question uses the plural hazards, so this opens up the possibilities for candidates to evaluate flood management against dealing with earthquakes for example. There is, however, no expectation that a response will tackle all the possible earth hazards. A response discussing two hazards in detail has the same potential to reach Level 3 as one that ranges across several hazards. A candidate who considers only one earth hazard is unlikely to score beyond top of Level 1 in AOs 1 and 2. **Indicative Content** Responses might consider factors such as: • Scale of hazard assessed in any number of ways e.g. energy released, areal extent, numbers of people affected • Degree of predictability e.g. contrast between earthquakes and volcanic eruptions • Economic development tends to go hand in hand with technological	30	**AO1 Knowledge and understanding** **Level 3 (8-9 marks)** Substantial knowledge and authoritative understanding of the management of earth hazards. There is secure use of detailed exemplification. **Level 2 (5-7 marks)** Sound knowledge and understanding of the management of earth hazards. Some responses might be assessed at this level if they offer a particularly uneven account of earth hazards e.g. focusing on just one with only a cursory mention of other(s). There is some use of exemplification. **Level 1 (1-4 marks)** Poor knowledge and understanding of the management of earth hazards. There is little exemplification. Some responses might only describe the management of one type of earth hazard. **0 marks:** no creditworthy response

	advances; technology can be seen as being important in terms of prediction, monitoring, mitigation and recovery • The contrast in management capabilities amongst countries at different points along the development continuum • The growth in numbers of people, increasing population densities and population migration into hazard-prone locations		**AO2 Analysis, interpretation and evaluation** **Level 3 (14-17 marks)** Clear and convincing analysis of the management of earth hazards. There is effective evaluation of changes in the capabilities of humans to manage earth hazards. **Level 2 (8-13 marks)** Some analysis of the management of earth hazards. Some evaluation of changes in the capabilities of humans to manage earth hazards. **Level 1 (1-7 marks)** Limited analysis of the management of earth hazards. Little or no attempt to evaluate changes in the capabilities of humans to manage earth hazards. **0 marks:** no creditworthy response **AO3 Skills and communication** **Level 3 (4 marks)** Clear structure and organisation, including a clear conclusion. Communication is clear with authoritative use of grammar and spelling and accurate use of geographical terms. Maps, diagrams and statistics are used effectively, if appropriate. **Level 2 (3 marks)** Sound structure and organisation, including a limited conclusion. Communication is generally effective although errors in grammar and spelling and some inaccurate use of geographical terms are

			likely to be present. Maps, diagrams and statistics are not used effectively. **Level 1 (1-2 marks)** Basic structure and organisation, with no attempt at a conclusion. Communication is ineffective with errors in grammar and spelling and little use of geographical terms or their inaccurate use. Maps, diagrams and statistics are not used. **0 marks:** no creditworthy response

Question	Answer	Marks	Guidance
8	***To what extent do floods bring only environmental impacts?*** One of the Questions for Investigation is '**What are the hazards associated with flooding?'** Associated with this is the Key Idea that '**Flooding has a range of environmental, social and economic impacts on the areas affected.**' The Specification is clear that this topic includes both river and coastal flooding. **Indicative Content** Responses might consider factors such as: • environmental factors such as dispersal of water beyond the channel; scouring of channel leading to realignment of channel post-flood; reworking of sediment e.g. bars; spread of sediment over floodplain; • social factors such as mortality; injury; dislocation of communities e.g people forced to leave their homes; disruption to education; disruption to health care e.g. cancelled operations, missed appointments • economic factors such as impact on agricultural land e.g. loss of flooded crops; loss of livestock; flooding of factories, warehouses, workshops, retailing, offices etc; disruption of transport; disruption of energy supplies;	30	**AO1 Knowledge and understanding** **Level 3 (8-9 marks)** Substantial knowledge and authoritative understanding of the full range of impacts of flooding. There is secure use of detailed exemplification. **Level 2 (5-7 marks)** Sound knowledge and understanding of the impacts of flooding. Some responses might be assessed at this level if they offer a particularly uneven account of impacts e.g. focusing on just one with only a cursory mention of other(s). There is some use of exemplification. **Level 1 (1-4 marks)** Poor knowledge and understanding of the management of the impacts of flooding. Some responses might only describe one type of impact. There is little exemplification.

	• contrasts in impacts on countries at different points along the development continuum • different capabilities of dealing with impacts e.g. contrast between restoring traffic flows along a flooded road c.f. making a flooded house habitable.		**0 marks:** no creditworthy response **AO2 Analysis, interpretation and evaluation** **Level 3 (14-17 marks)** Clear and convincing analysis of the different impacts of flooding. There is effective evaluation of the relative environmental, social and economic impacts of flooding. **Level 2 (8-13 marks)** Some analysis of the different impacts of flooding. Some evaluation of the relative environmental, social and economic impacts of flooding. **Level 1 (1-7 marks)** Limited analysis of the different impacts of flooding. Little or no attempt to evaluate the relative environmental, social and economic impacts of flooding. **0 marks:** no creditworthy response **AO3 Skills and communication** **Level 3 (4 marks)** Clear structure and organisation, including a clear conclusion. Communication is clear with authoritative use of grammar and spelling and accurate use of geographical terms. Maps, diagrams and statistics are used effectively, if appropriate. **Level 2 (3 marks)** Sound structure and organisation, including a limited conclusion. Communication is generally effective although errors in grammar and spelling and some inaccurate use of geographical terms are likely to be present. Maps, diagrams and statistics

			are not used effectively. **Level 1 (1-2 marks)** Basic structure and organisation, with no attempt at a conclusion. Communication is ineffective with errors in grammar and spelling and little use of geographical terms or their inaccurate use. Maps, diagrams and statistics are not used. **0 marks:** no creditworthy response

Question	Answer	Marks	Guidance
9	***To what extent does the level of economic and technological development influence impacts on physical environments?*** One of the Key Ideas in this Option is '**Why does the impact of human activity on the physical environment vary over time and location?'** The Content associated with this Key Idea advises that a study should be made of 'why the impact on physical environments may be increasing or decreasing with economic, social and technological development.' **Indicative Content** Responses might consider factors such as: • impacts of deforestation; high percentage loss of forest cover is in MEDCs e.g. UK as well as LEDCs e.g. Indonesia • impact of agro-ecosystems; intensive farming in MEDCs and some notable catastrophes e.g. Dust Bowl of mid-west USA; effects of poorly managed irrigation leading to salinisation e.g. parts of Pakistan and	30	**AO1 Knowledge and Understanding** **Level 3 (8-9 marks)** Substantial knowledge and authoritative understanding of the impacts of the level of economic and technological development on physical environments. There is secure use of detailed exemplification. **Level 2 (5-7 marks)** Sound knowledge and understanding of the impacts of the level of economic and technological development on physical environments. There is some use of exemplification. **Level 1 (1-4 marks)** Poor knowledge and understanding of the impacts of

	around Sea of Aral; role of organic movement in MEDCs in restoring environment • drainage, often in association with agricultural development; loss of wetland habitats; • urban developments across the development continuum replacing physical environment by a built environment; not all negative though as some species adapt and thrive • atmospheric pollution; has been very bad in MEDCs but in 21st century, most air pollution in LEDCs and industrialising countries, especially in urban areas • water pollution; same comment as about atmospheric pollution		the level of economic and technological development on physical environments. There is little exemplification. **0 marks:** no creditworthy response **AO2 Analysis, interpretation and evaluation** **Level 3 (14-17 marks)** Clear and convincing analysis and evaluation of the impacts of the level of economic and technological development on physical environments. **Level 2 (8-13 marks)** Some analysis and evaluation of the impacts of the level of economic and technological development on physical environments. **Level 1 (1-7 marks)** Limited analysis and evaluation of the impacts of the level of economic and technological development on physical environments. **0 marks:** no creditworthy response **AO3 Skills and communication** **Level 3 (4 marks)** Clear structure and organisation, including a clear conclusion. Communication is clear with authoritative use of grammar and spelling and accurate use of geographical terms. Maps, diagrams and statistics are used effectively, if appropriate. **Level 2 (3 marks)** Sound structure and organisation, including a limited conclusion. Communication is generally

			effective although errors in grammar and spelling and some inaccurate use of geographical terms are likely to be present. Maps, diagrams and statistics are not used effectively. **Level 1 (1-2 marks)** Basic structure and organisation, with no attempt at a conclusion. Communication is ineffective with errors in grammar and spelling and little use of geographical terms or their inaccurate use. Maps, diagrams and statistics are not used. **0 marks:** no creditworthy response

Question	Answer	Marks	Guidance
10	***Evaluate the extent to which change in ecosystems and environments mainly result from human activities.*** A Key Idea in this Option is that **'It is the interaction of the physical and human factors that create distinctive environments and lead to change within them.'** Candidates are expected to have studied at least one local ecosystem or environment e.g. woodland, dunes or a marsh so as to consider the main stores and flows within the ecosystem, the main physical factors and main human influences on the ecosystem. But it is quite possible and acceptable to discuss this question at scales other than the local. **Indicative Content** Responses might consider factors such as:	30	**AO1 Knowledge and Understanding** **Level 3 (8-9 marks)** Substantial knowledge and authoritative understanding the physical and human factors influencing change in ecosystems and environments and the ways in which they interact. There is secure use of detailed exemplification. **Level 2 (5-7 marks)** Sound knowledge and understanding of the physical and human factors influencing change in ecosystems and environments. And the ways in which they interact. Some responses might be assessed at this level if they offer a particularly uneven account of either physical or human factors. There is some use

	physical factors such as • climate including micro-climate • geology • relief • soils • flora and fauna human factors such as • woodland management • agriculture of all types • conservation of all types • pollution of all types • construction of the built environment e.g. settlements and transport routes		of exemplification. **Level 1 (1-4 marks)** Poor knowledge and understanding of the physical and human factors influencing change in ecosystems and environments and the ways in which they interact. There is little exemplification. **0 marks:** no creditworthy response **AO2 Analysis, interpretation and evaluation** **Level 3 (14-17 marks)** Clear and convincing analysis and evaluation of the roles physical and human factors play in change in ecosystems and environments and the ways in which they interact. **Level 2 (8-13 marks)** Some analysis and evaluation of the roles physical and human factors play in change in ecosystems and environments and the ways in which they interact. **Level 1 (1-7 marks)** Limited analysis and evaluation of the roles physical and human factors play in change in ecosystems and environments and the ways in which they interact. **0 marks:** no creditworthy response **AO3 Skills and communication** **Level 3 (4 marks)** Clear structure and organisation, including a clear conclusion. Communication is clear with authoritative use of grammar and spelling and accurate use of geographical terms. Maps, diagrams and statistics are used effectively, if

			appropriate. **Level 2 (3 marks)** Sound structure and organisation, including a limited conclusion. Communication is generally effective although errors in grammar and spelling and some inaccurate use of geographical terms are likely to be present. Maps, diagrams and statistics are not used effectively. **Level 1 (1-2 marks)** Basic structure and organisation, with no attempt at a conclusion. Communication is ineffective with errors in grammar and spelling and little use of geographical terms or their inaccurate use. Maps, diagrams and statistics are not used. **0 marks:** no creditworthy response

Question	Answer	Marks	Guidance
11	***How valid is the viewpoint that impacts of tropical storms are largely economic?*** One of the Questions for Investigation is **'In what ways do tropical storms represent a hazard to people?'** In the associated Content candidates are expected to have considered '… through examples, the hazards tropical storms present to particular areas and the impacts [environmental, social and economic] these hazards can have.' **Indicative Content** Responses might consider factors such as:	**30**	**AO1 Knowledge and Understanding** **Level 3 (8-9 marks)** Substantial knowledge and authoritative understanding of the full range of impacts of tropical storms. There is secure use of detailed exemplification. **Level 2 (5-7 marks)** Sound knowledge and understanding of the full range of impacts of tropical storms. Some responses might be assessed at this level if they offer a limited consideration of one of environmental, social or

	• physical impacts e.g. flooding both coastal and river including storm surge; damage due to high wind speeds; mass movements caused by heavy and intense rain; soil erosion • social impacts e.g. mortality; injury; dislocation of communities e.g. people forced to leave their homes; disruption to education; disruption to health care e.g. cancelled operations, missed appointments • economic factors such as impact on agricultural land e.g. loss of flooded and or wind damaged crops; loss of livestock; flooding of factories, warehouses, workshops, retailing, offices etc; disruption of transport; disruption of energy supplies; • contrasts in impacts on countries at different points along the development continuum • contrasts between long- and short-term impacts e.g. time required for a plantation to regrow compared to pumping out a flooded shop and restocking.		economic impacts. There is some use of exemplification. **Level 1 (1-4 marks)** Poor knowledge and understanding of the impacts of tropical storms. There may be little or no mention of two of environmental, social or economic impacts. There is little exemplification. **0 marks:** no creditworthy response **AO2 Analysis, interpretation and evaluation** **Level 3 (14-17 marks)** Clear and convincing analysis of the full range of impacts of tropical storms. There is effective evaluation of the relative significance of full range of impacts of flooding, environmental, social and economic. **Level 2 (8-13 marks)** Some analysis and evaluation of the range of impacts of tropical storms. There is some evaluation of the relative significance of the impacts of flooding, environmental, social and economic. **Level 1 (1-7 marks)** Limited analysis of the impacts of tropical storms. There is little or no evaluation of the relative significance of impacts of flooding, environmental, social and economic. **0 marks:** no creditworthy response **AO3 Skills and communication** **Level 3 (4 marks)** Clear structure and organisation, including a clear

			conclusion. Communication is clear with authoritative use of grammar and spelling and accurate use of geographical terms. Maps, diagrams and statistics are used effectively, if appropriate. **Level 2 (3 marks)** Sound structure and organisation, including a limited conclusion. Communication is generally effective although errors in grammar and spelling and some inaccurate use of geographical terms are likely to be present. Maps, diagrams and statistics are not used effectively. **Level 1 (1-2 marks)** Basic structure and organisation, with no attempt at a conclusion. Communication is ineffective with errors in grammar and spelling and little use of geographical terms or their inaccurate use. Maps, diagrams and statistics are not used. **0 marks:** no creditworthy response

Question	Answer	Marks	Guidance
12	***How far do you agree with the view that global warming is the result of human activities?*** One of the Key Questions in this Option is **'In what ways do human activities create climatic hazards?'** The associated Content states that candidates should have studied '**The causes of global warming.**' **Indicative Content** Responses might consider factors such as:	**30**	**AO1 Knowledge and understanding** **Level 3 (8-9 marks)** Substantial knowledge and authoritative understanding of the causes of global warming. There is secure use of detailed exemplification. **Level 2 (5-7 marks)** Sound knowledge and understanding of the causes of global warming. There is some use of

	• generation of GHGs from natural sources e.g. CO_2 from volcanic eruptions • generation of GHGs from human activities e.g. CO_2 from fuel combustion; CH_4 from rice padi fields and livestock farming; these linked with the enhanced greenhouse effect; increased water vapour as SSTs and atmospheric temperatures rise • variation in contributory factors from human activities across the development continuum, MEDCs, NICs and LEDCs • Milankovitch cycles – astronomical forcing • Changes in solar output – sunspot cycles There does not need to be an equal treatment of human and natural factors. It is possible to achieve Level 3 on the basis of either human or physical.		exemplification. **Level 1 (1-4 marks)** Poor knowledge and understanding of the causes of global warming. There is little exemplification **0 marks:** no creditworthy response **AO2 Analysis, interpretation and evaluation** **Level 3 (14-17 marks)** Clear and convincing analysis of the role of human activities in causing global warming. There is effective evaluation of the relative role of human activities in causing global warming. **Level 2 (8-13 marks)** Some analysis of the role of human activities in causing global warming. Some evaluation of the relative role of human activities in causing global warming. **Level 1 (1-7 marks)** Limited analysis of the role of human activities in causing global warming. Little or no attempt to evaluate the relative role of human activities in causing global warming. **0 marks:** no creditworthy response **AO3 Skills and communication** **Level 3 (4 marks)** Clear structure and organisation, including a clear conclusion. Communication is clear with authoritative use of grammar and spelling and accurate use of geographical terms. Maps, diagrams and statistics are used effectively, if

			appropriate. **Level 2 (3 marks)** Sound structure and organisation, including a limited conclusion. Communication is generally effective although errors in grammar and spelling and some inaccurate use of geographical terms are likely to be present. Maps, diagrams and statistics are not used effectively. **Level 1 (1-2 marks)** Basic structure and organisation, with no attempt at a conclusion. Communication is ineffective with errors in grammar and spelling and little use of geographical terms or their inaccurate use. Maps, diagrams and statistics are not used. **0 marks:** no creditworthy response

Question	Answer	Marks	Guidance
13	***To what extent is technological change responsible for altering how resources are defined?*** One of the Questions for Investigation in this Option is **'How can resources be defined and classified?'** Part of the associated Content refers to 'how changes in technology and society may result in changes in the definition of resources.'	**30**	**AO1 Knowledge and understanding** **Level 3 (8-9 marks)** Substantial knowledge and authoritative understanding of the ways resources might be defined and classified. There is secure use of detailed exemplification.

	There is no one agreed definition of a resource so we must be open to a variety of interpretations from candidates. **Indicative Content** Responses might consider factors such as: • what is a resource? Basic distinction between natural (e.g. soil, water, minerals) and human resources (e.g. numbers, skills) • differences between renewable, non-renewable, flow and semi-renewable resources • the role of technology in making something valuable when previously it was not e.g. uranium pre and post 20th century; natural gas in shale; • the role of technology in making something redundant as a resource e.g. flint – used to generate sparks or as a building material – both uses made redundant by technology • the changing role of technology through time e.g. wind was once very important in transport and energy generation (sailing vessels and windmills), then was left largely redundant due to technological change in 19th and 20th centuries and now 'rediscovered' in the use of turbines for power generation • the role of society e.g. change in attitude towards coal as a resource in some MEDCs but not in other countries; change in attitudes towards fur for clothing; change in attitudes towards CFCs		**Level 2 (5-7 marks)** Sound knowledge and understanding of the ways resources might be defined and classified. There is some use of exemplification. **Level 1 (1-4 marks)** Poor knowledge and understanding of the ways resources might be defined and classified. There is little exemplification. **0 marks:** no creditworthy response **AO2 Analysis, interpretation and evaluation** **Level 3 (14-17 marks)** Clear and convincing analysis of the ways resources might be defined and classified. There is effective evaluation of the role of technology in defining resources. **Level 2 (8-13 marks)** Some analysis of the ways resources might be defined and classified. There is some evaluation of the role of technology in defining resources. **Level 1 (1-7 marks)** Limited analysis of the ways resources might be defined and classified. There is little or no attempt to evaluate the role of technology in defining resources. **0 marks:** no creditworthy response **AO3 Skills and communication** **Level 3 (4 marks)** Clear structure and organisation, including a clear conclusion. Communication is clear with

			authoritative use of grammar and spelling and accurate use of geographical terms. Maps, diagrams and statistics are used effectively, if appropriate. **Level 2 (3 marks)** Sound structure and organisation, including a limited conclusion. Communication is generally effective although errors in grammar and spelling and some inaccurate use of geographical terms are likely to be present. Maps, diagrams and statistics are not used effectively. **Level 1 (1-2 marks)** Basic structure and organisation, with no attempt at a conclusion. Communication is ineffective with errors in grammar and spelling and little use of geographical terms or their inaccurate use. Maps, diagrams and statistics are not used. **0 marks:** no creditworthy response

Question	Answer	Marks	Guidance
14	***'The greatest demand for resources comes from MEDCs.' Discuss.*** One of the Key Ideas is **'Different parts of the world have differing demands (in terms of quantities and types of resources) and these change with time and development.'** The associated Content states that candidates should study **'…the different patterns of demand [for resources] in MEDC, NIC and LEDC and how these change with population growth and the rate of development.'** There is no one agreed definition of a resource so we must be open to a	**30**	**AO1 Knowledge and understanding** **Level 3 (8-9 marks)** Substantial knowledge and authoritative understanding of the demand for resources and the factors influencing this. There is secure use of detailed exemplification. **Level 2 (5-7 marks)**

	variety of interpretations from candidates. **Indicative Content** Responses might consider factors such as: • demand for resources is closely linked with ability to obtain resources which is itself linked with standard of living such as purchasing power (ppp). • demographic factors influence resource demand e.g. population size, structure and growth rates. A response focused only on demographic influences can reach top of Level 2 in AOs 1 and 2. • contrasts between MEDC / NIC / LEDC. In general as societies develop, so does their demand for resources – indeed that development however measured, relies on increasing resource availability e.g. energy, food, clean water. • the examples of NICs and their demand for resources e.g. China, Brazil, Mexico, even with the recent relative slowdown in economic growth • the examples of some LEDCs with their relatively low demand for resources e.g. energy consumption per head. • the examples of some LEDCs which supply large quantities of certain resources e.g. minerals but not for their own people but for NICs and MEDCs e.g. Democratic Republic of Congo or Angola • human capital as a resource e.g. Japan which possesses limited natural resources itself but is one of the most developed societies on Earth		Sound knowledge and understanding of the demand for resources and the factors influencing this. There is some use of exemplification. **Level 1 (1-4 marks)** Poor knowledge and understanding of the demand for resources and the factors influencing this. There is little exemplification. **0 marks:** no creditworthy response **AO2 Analysis, interpretation and evaluation** **Level 3 (14-17 marks)** Clear and convincing analysis of the factors influencing the demand for resources. There is effective evaluation of their relative influences. **Level 2 (8-13 marks)** Some analysis of the factors influencing the demand for resources. There is some evaluation of their relative influences. **Level 1 (1-7 marks)** Limited analysis of the factors influencing the demand for resources. There is little or no attempt to evaluate their relative influences. **0 marks:** no creditworthy response **AO3 Skills and communication** **Level 3 (4 marks)** Clear structure and organisation, including a clear conclusion. Communication is clear with authoritative use of grammar and spelling and

			accurate use of geographical terms. Maps, diagrams and statistics are used effectively, if appropriate. **Level 2 (3 marks)** Sound structure and organisation, including a limited conclusion. Communication is generally effective although errors in grammar and spelling and some inaccurate use of geographical terms are likely to be present. Maps, diagrams and statistics are not used effectively. **Level 1 (1-2 marks)** Basic structure and organisation, with no attempt at a conclusion. Communication is ineffective with errors in grammar and spelling and little use of geographical terms or their inaccurate use. Maps, diagrams and statistics are not used. **0 marks:** no creditworthy response

Question	Answer	Marks	Guidance
15	***How far do you agree with the view that globalisation brings environmental disadvantages?*** One of the Key Ideas is that **'Globalisation of economic activity may bring advantages and disadvantages to various areas. These impacts may be environmental, economic, social or political.'**	**30**	**AO1 Knowledge and understanding** **Level 3 (8-9 marks)** Substantial knowledge and authoritative understanding of the environmental impacts of globalisation. There is secure use of detailed

	Indicative Content Responses might consider factors such as: • economic restructuring in MEDCs led to deindustrialisation. This has brought both environmental advantages and disadvantages. Advantages = loss of polluting industry (air/water/land) and decline in mining / quarrying – reclamation of land. Disadvantages = derelict sites; contaminated land e.g. heavy metals. • economic restructuring in NICs and LEDCs led to industrialisation. Environmental disadvantages = pollution from mining / quarrying + manufacturing (air/water/land); loss of ecosystems / habitats. • increase in global trade led to increase in ocean shipping – atmospheric pollution from oil burning vessels + leaks of pollutants into water. Specific e.g. of oil tankers flushing their tanks on high seas. Port developments taken coastal / estuary environments. • increase in personal mobility via air travel brought environmental disadvantages e.g. GHG emissions. • globalisation brought about wider knowledge of other parts of the world for a great many people e.g. through increased tourism. Greater awareness of threats to ecosystems and environments which has given an impetus to protection and conservation. Funds generated in MEDCs flow through to NICs and LEDCs e.g. NGOs such as WWF. • globalisation brings other types of disadvantages e.g. social, economic or political		exemplification. **Level 2 (5-7 marks)** Sound knowledge and understanding of the environmental impacts of globalisation. There is some use of exemplification. **Level 1 (1-4 marks)** Poor knowledge and understanding of the environmental impacts of globalisation. There is little exemplification. **0 marks:** no creditworthy response **AO2 Analysis, interpretation and evaluation** **Level 3 (14-17 marks)** Clear and convincing analysis of the environmental advantages and disadvantages of globalisation. There is effective evaluation of the environmental advantages and disadvantages. **Level 2 (8-13 marks)** Some analysis of the environmental advantages and disadvantages of globalisation. There is some evaluation of the environmental advantages and disadvantages. **Level 1 (1-7 marks)** Limited analysis of the environmental advantages and disadvantages of globalisation. Little or no attempt to evaluate the environmental advantages and disadvantages. **0 marks:** no creditworthy response **AO3 Skills and communication**

			Level 3 (4 marks) Clear structure and organisation, including a clear conclusion. Communication is clear with authoritative use of grammar and spelling and accurate use of geographical terms. Maps, diagrams and statistics are used effectively, if appropriate. **Level 2 (3 marks)** Sound structure and organisation, including a limited conclusion. Communication is generally effective although errors in grammar and spelling and some inaccurate use of geographical terms are likely to be present. Maps, diagrams and statistics are not used effectively. **Level 1 (1-2 marks)** Basic structure and organisation, with no attempt at a conclusion. Communication is ineffective with errors in grammar and spelling and little use of geographical terms or their inaccurate use. Maps, diagrams and statistics are not used. **0 marks:** no creditworthy response

Question	Answer	Marks	Guidance
16	***Can governments successfully manage the impacts of globalisation?*** A Question for Investigation in this Option is, **'How can governments evaluate and manage the impact of globalisation?'** The associated Content states that candidates should investigate at least one country's methods of managing the impacts of globalisation on its economy and society. The response can therefore, discuss a single government or can	**30**	**AO1 Knowledge and Understanding** **Level 3 (8-9 marks)** Substantial knowledge and authoritative understanding of the ways government can evaluate and manage the impacts of globalisation. There is secure use of detailed exemplification.

	draw on more than one example. **Indicative Content** Responses might consider factors such as: • globalisation creates winners and losers at a variety of scales including the national • overall MEDCs and NICs tend to be the 'winners' and LEDCs the 'losers' • impacts are to be considered on economy and society; a response focused on one factor (e.g. economy or society) limited to top of Level 2 in AOs 1 and 2 • use of trade groupings either to gain from trade or to protect from forces outside of the grouping; this would apply to groupings such as G8, G21 etc • governments try to attract FDI and then direct its location within their boundaries – how successful has this been? • governments try to manage the activities of TNCs • governments try to manage population movements e.g. immigration • governments try to manage impacts of society e.g. cultural impacts		**Level 2 (5-7 marks)** Sound knowledge and understanding of the ways government can evaluate and manage the impacts of globalisation. There is some use of exemplification. **Level 1 (1-4 marks)** Poor knowledge and understanding of the ways government can evaluate and manage the impacts of globalisation. There is little exemplification. **0 marks:** no creditworthy response **AO2 Analysis, interpretation and evaluation** **Level 3 (14-17 marks)** Clear and convincing analysis of the management of the impacts of globalisation by governments. There is effective evaluation of the management of the impacts of globalisation by governments. **Level 2 (8-13 marks)** Some analysis of the management of the impacts of globalisation by governments. Some evaluation of the management of the impacts of globalisation by governments. **Level 1 (1-7 marks)** Limited analysis of the management of the impacts of globalisation by governments. Little or no attempt to evaluate the management of the impacts of globalisation by governments. **0 marks:** no creditworthy response **AO3 Skills and communication**

			Level 3 (4 marks) Clear structure and organisation, including a clear conclusion. Communication is clear with authoritative use of grammar and spelling and accurate use of geographical terms. Maps, diagrams and statistics are used effectively, if appropriate. **Level 2 (3 marks)** Sound structure and organisation, including a limited conclusion. Communication is generally effective although errors in grammar and spelling and some inaccurate use of geographical terms are likely to be present. Maps, diagrams and statistics are not used effectively. **Level 1 (1-2 marks)** Basic structure and organisation, with no attempt at a conclusion. Communication is ineffective with errors in grammar and spelling and little use of geographical terms or their inaccurate use. Maps, diagrams and statistics are not used. **0 marks:** no creditworthy response

Question	Answer	Marks	Guidance
17	***How valid is the viewpoint that economic inequalities cause unequal social and environmental conditions?*** One of the Key Ideas in this Option is **'Economic inequalities may result in social and environmental conditions also becoming unequal.'** The associated Content mentions variations between MEDCs and NICs and inequalities within a region or large city so the scale of analysis available to candidates is varied.	**30**	**AO1 Knowledge and Understanding** **Level 3 (8-9 marks)** Substantial knowledge and authoritative understanding of the interactions between economic inequalities and social and environmental conditions. There is secure use of detailed exemplification.

	Indicative Content Responses might consider factors such as: • social – access to education / health – high levels of economic development usually give good access and vice versa • social – housing quality – high levels of economic development usually result in high housing quality and vice versa • environmental – availability of clean water and effective waste disposal - high levels of economic development usually result in high water quality and vice versa • environmental – clean air - high levels of economic development usually result in high air quality and vice versa • at the global scale MEDC inhabitants are in the most favoured group but by changing the scale to the regional or metropolitan then inequalities emerge e.g. people living in areas still dominated by heavy industries or their legacies • at the global scale, NICs have seen considerable economic gains for their people but environmental issues may have increased e.g. air quality in Chinese cities; favelas in Brazil; barrios in Mexico		**Level 2 (5-7 marks)** Sound knowledge and understanding of the interactions between economic inequalities and social and environmental conditions. There is some use of exemplification. **Level 1 (1-4 marks)** Poor knowledge and understanding of the interactions between economic inequalities and social and environmental conditions. There is little exemplification. **0 marks:** no creditworthy response **AO2 Analysis, interpretation and evaluation** **Level 3 (14-17 marks)** Clear and convincing analysis of the relationship between economic inequalities and social and environmental conditions. There is effective evaluation of the relationship between economic inequalities and social and environmental conditions. **Level 2 (8-13 marks)** Some analysis of the relationship between economic inequalities and social and environmental conditions. Some evaluation of the relationship between economic inequalities and social and environmental conditions. **Level 1 (1-7 marks)** Limited analysis of the relationship between economic inequalities and social and environmental conditions. Little or no attempt to evaluate the relationship between economic inequalities and social and environmental conditions.

			0 marks: no creditworthy response **AO3 Skills and communication** **Level 3 (4 marks)** Clear structure and organisation, including a clear conclusion. Communication is clear with authoritative use of grammar and spelling and accurate use of geographical terms. Maps, diagrams and statistics are used effectively, if appropriate. **Level 2 (3 marks)** Sound structure and organisation, including a limited conclusion. Communication is generally effective although errors in grammar and spelling and some inaccurate use of geographical terms are likely to be present. Maps, diagrams and statistics are not used effectively. **Level 1 (1-2 marks)** Basic structure and organisation, with no attempt at a conclusion. Communication is ineffective with errors in grammar and spelling and little use of geographical terms or their inaccurate use. Maps, diagrams and statistics are not used. **0 marks:** no creditworthy response
Question	**Answer**	**Marks**	**Guidance**
18	***Evaluate the contribution of political factors to global variations in the level of development.*** One of the Questions for Investigation is **'Why do levels of economic development vary and how can they lead to inequalities?'** The associated Content states that candidates are to study **'The factors**	**30**	**AO1 Knowledge and Understanding** **Level 3 (8-9 marks)** Substantial knowledge and authoritative understanding of the influence political factors can have on development.

	(physical, economic, social, political and historical) that influence the relative level of development of a country.' **Indicative Content** Responses might consider factors such as: • good governance plays an essential part in advancing development • good governance involves democracy which involves the citizens of a country engaging politically to influence values and attitudes • attitudes towards education, health, infrastructure for example are generally most positive under good governance • particular significance in some countries is political influence of role and status of women e.g. access to education • bad governance tends to hold back development e.g. corrupt governments such as Zimbabwe and or authoritarian regimes such as North Korea or Myanmar • other factors such as economic, social and historical are interlinked with political and should be evaluated against political • other factors e.g. physical, social, historical, economic can be evaluated against political		There is secure use of detailed exemplification. **Level 2 (5-7 marks)** Sound knowledge and understanding of the influence political factors can have on development. There is some use of exemplification. **Level 1 (1-4 marks)** Poor knowledge and understanding of the influence political factors can have on development. There is little exemplification. **0 marks:** no creditworthy response **AO2 Analysis, interpretation and evaluation** **Level 3 (14-17 marks)** Clear and convincing analysis of the influence political factors can have on development. There is effective evaluation of the relative influence political factors can have on development. **Level 2 (8-13 marks)** Some analysis of the influence political factors can have on development. There is effective evaluation of the relative influence political factors can have on development. **Level 1 (1-7 marks)** Limited analysis of the influence political factors can have on development. There is little or no evaluation of the influence political factors can have on development. **0 marks:** no creditworthy response **AO3 Skills and communication**

			Level 3 (4 marks) Clear structure and organisation, including a clear conclusion. Communication is clear with authoritative use of grammar and spelling and accurate use of geographical terms. Maps, diagrams and statistics are used effectively, if appropriate. **Level 2 (3 marks)** Sound structure and organisation, including a limited conclusion. Communication is generally effective although errors in grammar and spelling and some inaccurate use of geographical terms are likely to be present. Maps, diagrams and statistics are not used effectively. **Level 1 (1-2 marks)** Basic structure and organisation, with no attempt at a conclusion. Communication is ineffective with errors in grammar and spelling and little use of geographical terms or their inaccurate use. Maps, diagrams and statistics are not used. **0 marks:** no creditworthy response.

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