

# GCSE GEOGRAPHY B

Unit 2F: Hostile world and investigating the shrinking world Mark scheme

9035 June 2014

Version 1.0/Stage: Final

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

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

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# GENERAL GUIDANCE FOR GCSE GEOGRAPHY ASSISTANT EXAMINERS

#### **Quality of Written Communication**

Where candidates are required to produce extended written material in English, they will be assessed on the quality of written communication.

Candidates will be required to:

present relevant information in a form and style that suits its purpose; ensure that text is legible and that spelling, punctuation and grammar are accurate; use specialist vocabulary where appropriate.

## Levels Marking - General Criteria

Where answers are assessed using a level of response marking system the following general criteria should be used.

#### Level 1: Basic

Knowledge of basic information Simple understanding Little organisation; few links; little or no detail; uses a limited range of specialist terms Reasonable accuracy in the use of spelling, punctuation and grammar Text is legible.

# Level 2: Clear

Knowledge of accurate information Clear understanding Organised answers, with some linkages; occasional detail/exemplar; uses a good range of specialist terms where appropriate Considerable accuracy in spelling, punctuation and grammar Text is legible.

# Annotation of Scripts

One tick equals 1 mark, except where answers are levels marked (where no ticks should be used). Each tick should be positioned in the part of the answer which is thought to be credit worthy.

Where an answer is levels marked the examiner should provide evidence of the level achieved by means of annotating 'L1'or 'L2'in the left hand margin.

The consequent mark within this level should appear in the right-hand margin.

Ticks must not be used where an answer is levels marked.

Examiners should add their own brief justification for the mark awarded e.g. *Just L2, clear and some elements of balance here.* 

Where an answer fails to achieve Level 1, zero marks should be given.

## **General Advice**

Marks for each sub-section should be added in the right-hand margin next to the maximum mark available which is shown in brackets. All marks should then be totaled in the 'egg' at the end of each question in the right-hand margin. The totals should then be transferred to the boxes on the front cover of the question paper. These should be totaled. The grand total should be added to the top right-hand corner of the front cover. No half marks should be used.

It is important to recognise that many of the answers shown within this mark scheme are only exemplars. Where possible, the range of accepted responses is indicated, but because many questions are open-ended in their nature, alternative answers may be equally creditworthy. The degree of acceptability is clarified through the Standardisation Meeting and subsequently by telephone with the Team Leader as necessary.

Diagrams are legitimate responses to many questions and should be credited as appropriate. However, contents which duplicate written material or vice versa should not be credited.

Quality of Written Communication (QWC) is part of the award of marks in levels marked answers only. In levels marked answers the quality of the geography is assessed and a level and mark awarded according to the geography. As is sometimes the case, the geography may be sound at a particular level but the examiner may not be sure as to whether there is quite enough to raise the mark within that level. In this case the examiner should consider the QWC of the answer. QWC that fulfils the criteria for the level should lead to the rise in the mark but where the QWC does not fulfil the criteria, the answer should remain at the mark first thought appropriate. In cases where QWC has been used in the award of marks, the examiner should indicate this with QWC and arrows that indicate either an upward or downward trend according to its impact on the final award of the mark.

1 (a) (i)	2 x 1		AO3 - 2 marks
	Pushing toge east	ether	
1 (a) (ii)	1 x 1		AO3 - 1 mark
	Strong		
1 (a) (iii)	1 x 1		AO2 - 1 mark
	Away from e	picentre/weak shaking	
1 (b)	2 x 1 Primary	<ul> <li>any idea of immediate/short term impacts</li> <li>collapsed buildings/destroyed roads/homes</li> <li>death/injury</li> <li>physical effects such as landslides, tsunami</li> <li>flooding – immediate impacts</li> </ul>	
	Secondary	<ul> <li>any idea of longer term impacts such as</li> <li>homelessness</li> <li>impacts of secondary hazards</li> <li>lack of fuel</li> <li>food shortages</li> <li>illness due to disease</li> <li>loss of services</li> <li>death (for example through disease) or injury must be qualified as a secondary</li> </ul>	

1 (c)	Levels of response	AO1 - 5 marks
	Possible ideas might include observations about planning and preparation.	
	Full mark range available to candidates to offer a range of ideas or development of a single idea.	
	Level 1 (Basic) 1-3 marks Simple statements without any real development. Largely descriptive observations which do not clearly reference the idea of 'how' the effects of earthquakes can be reduced. Ideas might include:	
	<i>'warning people, not building in high risk areas, having emergency kits, earthquake proof building, earthquake drills.'</i>	
	Level 2 (Clear) 4-5 marks Clear description with some linked/developed ideas which reference the idea of 'how' the effects of earthquakes can be reduced. Ideas might include:	
	'earthquake drills such as taught in schools enable people to protect themselves.'	
	'making sure that everyone has an emergency earthquake kit will mean that there will be less injuries because it will contain first aid supplies etc.'	
	'retrofitting buildings will make them stronger so that they will not collapse and cause injury.'	
1 (d)	4 x 1	AO1 - 4 marks
	Plates destructive magma ash	

1 (e)	Levels of response	AO1 - 5 marks
	Possible ideas will include points about fertile soils/farming: possibility of geothermal energy, mineral extraction, links to tourism AND/OR observations about perception (it may not happen, the general advantages are greater than the risks, planning and preparation reduces risks, no real choice, can't afford to move).	
	Level 1 (Basic) 1-3 marks Simple statements without and real development or clear 'cause- effect' links. Largely descriptive references which identify advantages without developing the socio-economic points.	
	'In volcanic areas the soil is very good for farming and the area attracts lots of tourists. Also if you have lived there a long time you may not want to move.'	
	Do not accept cheaper housing.	
	Level 2 (Clear) 4-5 marks Clear description with some development of ideas/reasoning.	
	'Volcanic soil is very fertile because of all the minerals. This means that it is good for growing crops so farmers can earn a good income. These areas attract lots of tourists which brings money in and creates a lot of jobs for local people. In rich countries people feel safe in these areas because they are well- prepared.'	
1 (f) (i)	2 x 1 3 ticks max 1. 4 ticks scores 0.	AO3 - 2 marks
	<ul> <li>True - On 17 August 2007 Hurricane Dean was to the south of Puerto Rico.</li> <li>True - On 17 August 2007 Hurricane Dean was at latitude 15 degrees north and longitude 66 degrees west.</li> </ul>	
1 (f) (ii)	1 x 1	AO3 - 1 mark
	Mexico (accept Belize, Cuba, Guatemala)	
1 (f) (iii)	1 x 1	AO3 - 1 mark
	Accept distance between 600-700km	
1 (f) (iv)	1 x 1 Decrease/slows down/lessens	AO2 1 mark
1 (f) (v)	<b>2 x 1</b> Lose energy (1) over land (1)	2 marks AO1 -1 mark AO2 - 1 mark

1 (f) (vi)	Levels of response	6 marks
	Possible arguments include:	AO1 – 1 mark AO2 – 4 marks
	<b>Yes:</b> Speed/track cannot be accurately predicted/inaccuracy of forecast, better safe than sorry, references to cone of uncertainty/	AO3 – 1 mark
	possible track are, even 'storm-proof' houses can be damaged, the threats posed by strong winds/heavy rain/flooding/storm surges, look for references to named storms and real flooding events.	SPaG –3 marks
	<b>No:</b> Not going to affect all of US coast (use of direction, location). It is possible to prepare/there is increased awareness of how to prepare (lessons, posters, internet, leaflets), many now have emergency kits, waterproof tiles, strengthened buildings, stilts,	
	Level 1 (Basic) 1-4 marks Simple statements without development of ideas. Lifts from	
	resource.	
	<b>Yes:</b> Simple ideas about advantages of evacuation or dangers posed by tropical storms.	
	E.g. Tropical storms often get stronger as they approach land, you can't wait until the last minute to evacuate, better safe than sorry, tropical storms cause massive destruction/death, there could be a storm surge, the storm could suddenly change direction. Accept simple ideas about never being able to beat the forces of nature.	
	<b>No:</b> Simple ideas about disadvantages of evacuation/forecasts/no need to evacuate whole area.	
	E.g. forecasts can be inaccurate, the strongest winds will not affect all areas, some areas inside the 3/5 day cone of uncertainty will only be affected a little, people should judge for themselves whether they need to evacuate, houses are looted, rods get congested, evacuation is expensive, can make houses storm-proof.	
	Level 2 (Clear) 5-6 marks Clear reasons with development of ideas. Development from resource.	
	<b>Yes</b> : Clear ideas about advantages of evacuation or dangers posed by tropical storms.	
	E.g. It is impossible to forecast with 100% accuracy and the storm could hit unexpectedly; in 2010 forecasts were346km out on average.	
	Accept clear ideas about never being able to beat the forces of nature.	

Development may be case study examples.	
E.g. Hurricanes are unpredictable and can change track suddenly, people didn't expect Hurricane Hanna to hit Haiti, but it did and caused many deaths.	
No: Clear ideas about disadvantages of evacuation/forecasts.	
E.g. The area of strongest winds will only affect an area of 150km; just the people in the south of Texas should consider evacuating. Evacuation could cause panic and lead to congested evacuation routes; people would be in danger if they were stuck in a traffic jam when the tropical storm hit.	
Development may be case study examples.	
Spelling, Punctuation and Grammar (SPaG)	·
<b>Threshold Performance – 1 mark</b> Candidates spell, punctuate and use the rules of grammar with reasonable accuracy in the context of the demands of the question. Any errors do not hinder meaning in the response. Where required, they use a limited range of specialist terms appropriately.	
Intermediate Performance – 2 marks Candidates spell, punctuate and use the rules of grammar with considerable accuracy and general control of meaning in the context of the demands of the question. Where required, they use a good range of specialist terms with facility.	
<b>High Performance – 3 marks</b> Candidates spell, punctuate and use the rules of grammar with consistent accuracy and effective control of meaning in the context of the demands of the question. Where required, they use a wide range of specialist terms adeptly and with precision.	

1(g)	Levels of response	4 marks
	Possible human causes and natural causes are indicated in the Level 1 descriptor. Causes could be quasi-natural.	AO1 – 2 marks AO2 – 1 mark AO3 – 1 mark
	Level 1 (Basic) 1-2 marks Simple statements without development of ideas.	
	E.g. period of hot/dry weather, (accept strong winds),sun needs qualifying, lightning strikes, spontaneous, volcanic eruptions people being careless (campfires/cigarettes), arson, downed power lines, sunlight reflecting off broken glass, sparks from machinery/vehicles.	
	Level 2 (Clear) 3-4 marks Clear reasons with development of ideas. Clearly links statements.	
	E.g. They are mainly caused by people being careless as they discard cigarette ends which are still smouldering which can set fire to dry grass.	
	Links together natural and/or human factors. <i>E.g. they are mainly caused by people being careless but will spread quickly if the grass is dry after a period of hot dry weather.</i>	
	(Responses that focus on why the fire spreads rapidly are acceptable, but the link must be clear. Accept references to the effect of topography, lack of windbreaks, fuelling from built-up areas, etc.)	
	Development could be case study examples. E.g. An arsonist started a wildfire in Victoria, Australia the wildfire spread quickly as vegetation was very dry.	

1 (h)	3 x 1	3 marks
' ('')	3.1	5 marks
	Possible reasons include: Loss of crops/income – vineyards/farmland, destruction of holiday facilities and subsequent economic impacts and job losses, damage to other infrastructure (roads, etc), destruction of	AO2 – 2 marks AO3 – 1 mark
	woodland and impacts on the ecosystem. Destruction of homes, etc in small settlements and/or city and consequences of this.	
	No credit will be given for merely listing features from the figure; there must be some simple indication of an effect.	
	E.g. Forest - destroys animal habitat, loss of beautiful scenery. City - destroys homes. Farmland – crops destroyed. Holiday park – fewer tourists.	
	Allow 1+1 for clear suggestions with development of ideas.	
	E.g. destroy homes (1) which increases insurance claims and raises premiums (1), destroy businesses (1) which causes unemployment and damages the economy of the area (1), pollute the air (1) and cause breathing problems (1), changes the local ecosystems (1) as animal habitat destroyed (1), destroys forests/tourist facilities (1) which stops tourists visiting and causes job losses (1), fewer trees (1) can lead to soil erosion and flooding/mudslides (1).	

2 (a) (i)	2 x 1	AO3 - 2 marks
	<ul> <li>3 ticks maximum 1 mark.</li> <li>4 ticks 0 marks.</li> <li>True - All of the areas with a very high risk of desertification are within 400km of an area of hot desert.</li> <li>True - Five of the states of Australia have areas with a very high risk of desertification.</li> </ul>	
2 (a) (ii)	1 x 1	AO3 - 1 mark
	South east (SE)	
2 (a) (iii)	<ul><li>1 + 1</li><li>Onshore winds/winds bring rain/wet winds.</li><li>Accept references to mountainous area/relief rainfall.</li></ul>	2 marks AO1 – 1 mark AO2 – 1 mark

2 (b)	Levels of response	5 marks AO1 – 2 marks
	Possible reasons include: Low rainfall, orographic rainfall over mountains, rain shadow, dry winds inland. References to latitude (Tropic of Capricorn) and the effects of this: High pressure, concentration of solar energy. Prevailing winds	AO2 – 2 marks AO3 – 1 mark
	offshore in the west, cold currents offshore in the west.	
	PHYSICAL LINKS TO DESERTIFICATION – MAX 2 MARKS.	
	Level 1 (Basic) 1-3 marks Refers to Figure 4 and/or own knowledge. Simple reference to reasons for low rainfall; dry winds, rain shadow, etc.	
	Accept simple statements about high pressure or descending air or little condensation or few clouds i.e. not linked. Accept simple references to effects of climate on vegetation.	
	E.g. very few plants are able to grow.	
	And/or some simple reference to the effect of latitude, e.g. sun's rays passing through less of the atmosphere. A smaller area of the Earth's surface has to be heated.	
	Level 2 (Clear) 4-5 marks Refers to Figure 4 and/or own knowledge. Gives clear indication of process, linking statements. Clear reasons for the formation with development of ideas.	
	Accept clear statements about high pressure or descending air leading to little condensation and few clouds, i.e. linked. And/or some clear reference to reasons for low rainfall; dry winds, rain shadow continentally, etc. <i>E.g.</i> it is in a rain shadow area, <i>as</i> <i>moist winds off the sea rise over highland and condense/cool and</i> <i>precipitation occurs in the mountains the wind will be dry when they</i> <i>reach place A and it receives little rainfall. High temperatures</i> <i>mean that any moisture that reaches inland areas is quickly</i> <i>evaporated.</i>	
	Accept clear references to effects of climate on vegetation. E.g. very few plants are able to grow except those that are adapted to the dry conditions.	
	Clear reference to the effect of latitude, e.g. sun's rays passing through less of the atmosphere and therefore lose less heat. A smaller area of the earth's surface has to be heated due to the lesser curvature of the earth.	

2 (c)	3 x 1	AO1 - 3 marks
	removed, grassland, erosion	
2 (d)	Levels of response	AO1 - 5 marks
	Possible schemes are indicated in the Level 1 descriptor.	
	Level 1 (Basic) 1-3 mark Simple statements without development of ideas. Names schemes.	
	Accept any prevention/soil or water management scheme/training or education scheme. E.g. Coppicing, reforestation, reseeding, terracing, earth bunds, magic stones, earth dams, animal husbandry, crop rotation, wind breaks/shelter belts, irrigation, rainwater harvesting and storage. Accept schemes designed to tackle the causes of desertification e.g. efficient stoves.	
	Level 2 (Clear) 4-5 marks Clear description with development of ideas.	
	Accept any prevention/soil or water management scheme/training or education scheme with an indication of how desertification might be reduced. E.g. <i>Coppicing means that branches are</i> <i>removed and the entire tree is not cut down. The stone lines trap</i> <i>rain water which reduces surface run-off across the land. Animal</i> <i>husbandry means fewer animals can be kept on the land as those</i> <i>which are kept will be healthy and produce more meat. Planting</i> <i>trees means more rainwater is intercepted and overland flow is</i> <i>reduced. Earth bunds catch soil flowing down the hill and stop the</i> <i>soil from drying out so less is blown away.</i>	
	Accept schemes designed to tackle the causes of desertification with clear links to cause. e.g. <i>efficient stoves reduce demand for firewood and means that</i> <i>fewer trees have to be removed for fuelwood.</i>	

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2 (e) (i)	3 x 1	AO3 - 3 marks
	True, True, False	
2 (e) (ii)	1+1	2 marks
	Accept answers relating to high rainfall, high temperatures, high	AO1 – 1 mark
	humidity, continuous growing season. Accept equatorial climate.	AO2 – 1 mark
	1+1 for clear suggestion with development of an idea.	
2 (e) (iii)	1 x 1	AO3 - 1 mark
- (-) ()	South America/Amazon/Amazon Basin/Amazonia	
2 (f)	Levels of response	6 marks
~ ~ ~		AO1 – 1 mark
	Possible arguments include:	AO2 – 4 marks
	<b>Yes</b> – references to economic advantages and social advantages	AO3 – 1 mark
	for both local people and the wider economy/country and the	
	ability to use technology to minimise the destructive effects on the	SPaG – 3 marks
	natural environment/local communities. Only a very small area	
	affected.	
	<b>No</b> – references to effects on the natural environment at local,	
	regional and global scale. The case for using renewables as	
	opposed to fossil fuels. Alternative forms of income e.g. carbon	
	credits.	
	Level 1 (Basic) 1-4 marks	
	Identifies advantages and/or disadvantages with limited	
	development.	
	Simple statements without development of ideas. Lifts from	
	resource.	
	<b>Yes:</b> Simple ideas about advantages of exploiting oil.	
	E.g. brings in money/jobs for local people, oil companies build	
	facilities for local people, raises GNI/wealth, only a very small	
	area of rainforest will be affected.	
	Net Simple ideas about advantages of not evaluating all	
	<b>No:</b> Simple ideas about advantages of not exploiting oil.	
	E.g. conservation of trees/animals, indigenous people do not lose	
	homes/land/livelihoods, less carbon dioxide going into the	
	atmosphere, tourists will still visit, compensation money raised	
	would be invested in renewable energy projects, water courses	
	not polluted.	
	1	

## Level 2 (Clear) 5-6 marks

Clear reasons with development of ideas from the resource. Identifies advantages and/or disadvantages and offers some clear reasoning.

**No:** Clear ideas about advantages of not exploiting oil. *E.g.* conservation of trees/plants some of which could be used as medicines, conservation of animal habitats which means some rare species of animals are at lesser risk of extinction, indigenous people do not lose homes/land/livelihoods as they are still able to hunt and gather and continue with their traditional lifestyle, less carbon dioxide going into the atmosphere which reduces the threat of global warming, tourists will still visit and this can have a multiplier effect on the local economy, compensation money raised would be invested in renewable energy projects which will make Ecuador less dependent on oil.

Development may be case study examples.

**Yes:** Clear ideas about advantages of exploiting oil. *E.g. brings in money/jobs for local people which they desperately need as there are few other opportunities to make a living, oil companies build facilities for local people which improves their quality of life and which otherwise they would not have as the government cannot afford to provide them, oil companies pay taxes which raises money for the government and increases GNI/wealth, only a very small area of rainforest will be affected and they could conserve other areas where there is no oil.* 

# Spelling, Punctuation and Grammar (SPaG)

#### Threshold Performance – 1 mark

Candidates spell, punctuate and use the rules of grammar with reasonable accuracy in the context of the demands of the question. Any errors do not hinder meaning in the response. Where required, they use a limited range of specialist terms appropriately.

#### Intermediate Performance – 2 marks

Candidates spell, punctuate and use the rules of grammar with considerable accuracy and general control of meaning in the context of the demands of the question. Where required, they use a good range of specialist terms with facility.

#### High Performance – 3 marks

Candidates spell, punctuate and use the rules of grammar with consistent accuracy and effective control of meaning in the context of the demands of the question. Where required, they use a wide range of specialist terms adeptly and with precision.

2 (g)	Levels of response	4 marks
(0)	•	AO1 – 2 marks
	Possible opportunities include:	AO2 – 1 mark
	Fishing/krill/whaling, tourism – (passive and non-passive), mineral exploitation, scientific research and associated road building and other infrastructure.	AO3 – 1 mark
	Level 1 (Basic) 1-2 marks	
	Simple statements without development of ideas.	
	E.g. Take fish and whales from the sea, exploit minerals, to discover if minerals lay beneath the ice and whether these could be mined, accommodate tourists, to be used as a place for scientific research.	
	Level 2 (Clear) 3-4 marks Clear reasons with development of ideas. Clearly links statements.	
	E.g. Research bases were developed to enable the study of the world and the effects that human activity can have on it. Development of ideas may be case study examples. E.g. the Northstar oil platform was built offshore in the Beaufort Sea to exploit new oil reserves. The US developed oilfields in Alaska so they did not have to depend on foreign oil supplies.	

<b>4 x 1</b> (1+1+1+1 for developed point) Possible reasons include:	4 marks AO1 – 1 mark AO2 – 2 marks AO3 – 1 mark
Human dependence on the natural environment, opportunities for scientific research and 'pristine wilderness' ideas.	AU3 – T mark
No credit will be given for merely listing features from the figure; there must be some simple indication of an effect. <i>E.g.</i> To avoid threats from shipwrecks, oil spills/pipeline rupture – pollution of sea, threats to wildlife/plants, loss of animal habitats, damage to ecosystem. To preserve an area of outstanding natural beauty/a pristine environment.	
Allow 1+1 for clear suggestions with development of ideas. E.g. To avoid loss of animal habitats (1) this leads to species becoming endangered or extinct/disruption of ecosystem (1). Damages areas of unspoilt wilderness such as Antarctica (1) – if oil drilling took place here a great natural laboratory for research into our world would be lost forever (1). In cold environments oil tankers are at risk from icebergs (1) and any oil spill would damage the ecosystem and disrupt the food chain (1).	
Clear development of ideas may be case study examples. <i>E.g. in Prudhoe Bay in 2006 oil leaked from a pipeline, it polluted an area of tundra crossed by migrating caribou.</i>	
<b>2 x 1</b> References to international agreements, fishing quotas, management of tourism, IAATO, Nature Reserves, limiting economic activity/rules, alternative energy, waste removal, mining ban, reducing global warming	AO1 - 2 marks
<b>1 x 1</b> Credit an expression of the idea of international/cross-	AO1 - 1 mark
If 3 boxes ticked, Max 1 mark. If 4 boxes ticked, 0 marks. <b>2 x 1</b> The TNC's HQ is also in Indiana, so managing the factories is easier.	AO1 - 2 marks
	0
<ul> <li>3 x 1 (1+1 for developed point)</li> <li>Possibilities include: Market size, growth in SE Asia, cheap/available labour, free trade, fewer employment laws, favourable tax regimes, transfer pricing, government policy.</li> <li>1 mark for a simple valid suggestion and a 2<sup>nd</sup> mark is available for development of a point.</li> <li>e.g. Large market so profitable to open/build factory</li> <li>e.g. Cheap labour, so production costs are reduced.</li> </ul>	3 marks AO1 – 2 marks AO2 – 1 mark
	<ul> <li>Possible reasons include:</li> <li>Effects on animal population and ecosystem (land and marine).</li> <li>Human dependence on the natural environment, opportunities for scientific research and 'pristine wilderness' ideas.</li> <li>No credit will be given for merely listing features from the figure; there must be some simple indication of an effect.</li> <li>E.g. To avoid threats from shipwrecks, oil spills/pipeline rupture – pollution of sea, threats to wildlife/plants, loss of animal habitats, damage to ecosystem. To preserve an area of outstanding natural beauty/a pristine environment.</li> <li>Allow 1+1 for clear suggestions with development of ideas.</li> <li>E.g. To avoid loss of animal habitats (1) this leads to species becoming endangered or extinct/disruption of ecosystem (1). Damages areas of unspoilt wilderness such as Antarctica (1) – if oil drilling took place here a great natural laboratory for research into our world would be lost forever (1). In cold environments oil tankers are at risk from icebergs (1) and any oil spill would damage the ecosystem and disrupt the food chain (1).</li> <li>Clear development of ideas may be case study examples. E.g. in Prudhoe Bay in 2006 oil leaked from a pipeline, it polluted an area of tundra crossed by migrating caribou.</li> <li>2 x 1</li> <li>References to international agreements, fishing quotas, management of tourism, IAATO, Nature Reserves, limiting economic activity/rules, alternative energy, waste removal, mining ban, reducing global warming.</li> <li>1 x 1</li> <li>Credit an expression of the idea of international/crossborder/more than one country.</li> <li>If 3 boxes ticked, 0 marks.</li> <li>2 x 1</li> <li>The TNC's HQ is also in Indiana, so managing the factories is easier.</li> <li>Many other factories in the United States can supply parts.</li> <li>3 x 1 (1+1 for developed point)</li> <li>Possibilities include: Market size, growth in SE Asia, cheap/available labour, free trade, fewer employment laws, favourable tax regimes, transfer pricin</li></ul>

3 (b)	3 x 1 (1+1+1 for developed point)	AO1 - 3 marks
	Problems can be environmental, socio-economic or cultural. Examples of problems might include pollution, consumption of scarce resources, loss of indigenous companies/jobs, risk of 'plug-pulling' by the TNC, exploiting local government aid/wasting capital infrastructure investment, imposition of/clash with foreign cultural practices, health and safety issue, conflict with local people.	
	1 mark for simple statement, and second/third mark for development.	
	One of the two development marks can be an example.	
	Simple statement/s of problem/s e.g. TNCs put local firms out of business (1) because they produce more cheaply (1) as happened with car-making in the UK	
3 (c) (i)	<b>2 x 1</b> 1 mark for bar at 14%, 1 mark for correct shading. (line must touch appropriate horizontal line. Ignore width of bar.)	AO3 - 2 marks
3 (c) (ii)	<b>2 x 1</b> 1 mark for nature of difference (e.g. more) and 1 mark for use of data. (Accept 5.5 – 6% increase or quote data 0.75% to 6.5%) (Accept – 8 to 9 times higher)	AO3 - 2 marks
3 (d) (i)	<b>4 x 1</b> Southern, 1000, Manitoba, Vancouver	AO3 - 4 marks
3 (d) (ii)	Levels of response	AO1 - 5 marks
	Possible suggestions include: demand for knowledge-based (quaternary)/hi-tech products has been particularly high in developed countries, where access to research facilities like universities is also greater. Universities have been keen to develop science and research parks to build their reputation/market and for income. Governments provided aid for advanced economic development reasons. Skills/knowledge base greater in developed countries such as Canada.	
	Do not credit benefits unless connected to a development scheme.	
	<b>Level 1 Basic (1-3 marks)</b> Simple valid suggestions <i>e.g. university research facilities have</i> <i>helped these science and research parks grow.</i>	
	Level 2 Clear (4-5 marks) Clear links between suggestions and science and research park development. Development of points. <i>E.g. university research</i> <i>facilities have helped these parks grow because they provide</i> <i>advanced technological know-how to help hi-tech firms develop</i> <i>nearby. The Cambridge Science Park is a UK example.</i> Development can be case study examples.	

3 (e) (i)	2 x1	AO1 - 2 marks
3 (e) (ii)	Life expectancy, economic. 2 x 1	AO2 - 2 marks
	High HDI / GNI or rank. One mark for each correct reason from Figure 12. Not just lifting data with no reasoning / link (accept comparison).	
3 (e) (iii)	<b>2 x 1</b> – accept any data linked to difference large. 1 mark per valid use of data from <b>Figure 12</b> . <i>E.g UK has HDI</i> (0.17) much higher than Sri Lanka (1 mark), UK has a much higher GNI ranking (88) (1 mark).	2 marks AO2 – 1 mark AO3 – 1 mark
3 (f)	Levels of response	6 marks
	Examples can be place and/or examples of benefits.	AO14 marks AO2 – 2 marks
	Possible benefits include: employment, higher wages/increased prosperity, social benefits from improved infrastructure/social spending enabled by, for instance, increased tax revenue.	SPaG - 3 marks
	<b>Level 1 Basic (1-4 marks)</b> Simply stated benefit/s <i>e.g. more jobs, better wages</i> . Points simply stated (rather than used to make a point) or basic linked points.	
	<b>Level 2 Clear (5-6 marks)</b> Clear description of how the development of new industry can benefit an area. Uses example(s) to make point(s) <i>e.g. new</i> <i>industry may bring jobs that weren't there before so that people</i> <i>can now earn a good wage like when the Nissan car factory</i> <i>opened in Sunderland.</i>	
	Spelling, Punctuation and Grammar (SPaG)	
	Threshold Performance – 1 mark Candidates spell, punctuate and use the rules of grammar with reasonable accuracy in the context of the demands of the question. Any errors do not hinder meaning in the response. Where required, they use a limited range of specialist terms appropriately.	
	Intermediate Performance – 2 marks Candidates spell, punctuate and use the rules of grammar with considerable accuracy and general control of meaning in the context of the demands of the question. Where required, they use a good range of specialist terms with facility.	
	<b>High Performance – 3 marks</b> Candidates spell, punctuate and use the rules of grammar with consistent accuracy and effective control of meaning in the context of the demands of the question. Where required, they use a wide range of specialist terms adeptly and with precision.	

3 (g)	Levels of response	6 marks
	Accept broad ideas about sustainability which might include social/economic and environmental considerations.	AO1 – 1 mark AO2 – 4 marks AO3 – 1 mark
	The factory in Figure 13 is an example of sustainable industrial development because it: eliminates net carbon emissions, uses 25% less energy, stays cool through local clay bricks that retain less heat, has an open airy design, uses shade from overhangs and also reduces energy use to conserve future resources.	
	<b>Level 1 Basic (1-4 marks)</b> Simple statement(s) of sustainable industrial development, <i>e.g. reduces air pollution eliminating carbon emissions. Do not</i> <i>accept straight lifts, there must be some simple elaboration</i> <i>beyond figure 13.</i>	
	<b>Level 2 Clear (5-6 marks)</b> Clear explanation of sustainability. Development of points e.g. reduces air pollution by eliminating carbon emissions so there is less contribution to future global warming. Bricks made of local materials so this provides employment and income for local people.	
4 (a) (i)	<b>1 x 1</b> Idea of world <i>e.g. worldwide/world-scale/around the world</i> .	1 mark - AO1
4 (a) (ii)	<b>3 x 1</b> Northern, Europe, France	3 marks - AO3
4 (a) (iii)	<ul> <li>3 x 1</li> <li>Demand for holidays in exotic locations has increased recently.</li> <li>Governments in less developed countries often encourage tourism development.</li> <li>Tourists are more familiar with travel to faraway places.</li> </ul>	3 marks AO1 – 1 mark AO2 – 2 marks
4 (a) (iv)	<b>1 + 1</b> Increased atmospheric pollution (1) from aircraft fumes (1) contributing to the greenhouse effect (1) increasing global warming (1).	2 marks AO1 – 1 mark AO2 – 1 mark
4 (b)	<ul> <li>4 x 1 Go to 1 + 1 + 1 + 1 for developed points. Examples of problems include unemployment, loss of trade/income, de-multiplier effect, closure of associated service industries, physical decay of buildings.</li> <li>1 mark for simple statement, 1 mark for development e.g. people lose their jobs and have less income to spend in local shops, so they close too.</li> </ul>	4 marks - AO1

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4 (c) (i)	2 x 1	
	1 mark for bar at +5.6%. 1 mark for bar at -3.6%. Bar must touch	
	appropriate line.	
4 (c) (ii)	2 x 1	2 marks - AO3
	1 mark for nature of change (e.g. increase in tourist arrivals) or	
	(e.g. % change less) and 1 for correct use of data (e.g. between	
	3.3% to 3.5%) – accept within this range.	
4 (d) (i)	2 x 1	2 marks - AO1
	Life expectancy, economic	
4 (d) (ii)	2 x 1	2 marks
	High HDI/GNI or rank. 1 mark for each correct reason from Figure	AO2 – 1 mark
	<ol><li>Not just lifting data with no reasoning /link.</li></ol>	AO3 – 1 mark
	Accept comparison.	
4 (d) (iii)	1 mark per valid use of data from Figure 16. E.g. UK HDI 0.22	2 marks
	higher than Egypt (1). UK has a higher GNI ranking by 86 (1).	AO2 – 1 mark
	Accept any data linked to difference. Accept large.	AO3 – 1 mark
4 (d) (iv)	Levels of response	5 marks
		AO1 – 3 marks
	Advantages include: economic benefits in less developed	AO2 – 1 mark
	countries such as Egypt in-destination spend, some locals are	AO3 – 1 mark
	better off and so, the gap may be narrowed, tax revenues may be	
	spent on development.	
	Level 1 Basic (1-3 marks)	
	Simply stated advantage/s of tourism as a way of raising	
	standards of living and income e.g. money from tourism may be	
	spent on development.	
	Level 2 Clear (4-5 marks)	
	Clear explanation of advantages. Refers to example(s) from	
	Figure 16 and/or own knowledge e.g. tourists to Jamaica often	
	stay in large hotels, spending a lot of money locally.	

4 (e)	Levels of response	6 marks - AO1
	Level 1 Basic (1-4 marks) Identifies a number of simple descriptive conflicts/problems that might be found in tourist areas. Limited reference to the idea of 'honeypot' or locational reference.	SPaG 3 marks
	E.g. in the Lake District lots of people visit and this brings in a lot of traffic which causes congestion. There are problems of erosion and litter and places become overcrowded.	
	Level 2 Clear (5-6 marks) Some reference to conflicts/problems in a small area caused by conflicting activities or overcrowding	
	Clear explanation of the methods linked to an appropriate case study example. <i>E.g. Tourist car parking in a small Lakes village might annoy</i> <i>locals by blocking their space.</i>	
	Spelling, Punctuation and Grammar (SPaG)	
	Threshold Performance – 1 mark Candidates spell, punctuate and use the rules of grammar with reasonable accuracy in the context of the demands of the question. Any errors do not hinder meaning in the response. Where required, they use a limited range of specialist terms appropriately.	
	<b>Intermediate Performance – 2 marks</b> Candidates spell, punctuate and use the rules of grammar with considerable accuracy and general control of meaning in the context of the demands of the question. Where required, they use a good range of specialist terms with facility.	
	<b>High Performance – 3 marks</b> Candidates spell, punctuate and use the rules of grammar with consistent accuracy and effective control of meaning in the context of the demands of the question. Where required, they use a wide range of specialist terms adeptly and with precision.	

4 (f)	Levels of response	6 marks
	The ecotourism development in Figure 17 is sustainable by employing local staff, growing vegetables on site, recycling food waste, using local building and furnishing materials, using local seawater and fish.	AO1 – 1 mark AO2 – 4 marks AO3 – 1 mark
	<b>Level 1 Basic (1-4 marks)</b> Simple statement(s) of sustainable tourism <i>e.g. keeping money in the area by employing local staff.</i> Do not accept straight lifts; there must be some simple elaboration beyond figure 20.	
	Level 2 Clear (5-6 marks) Clear explanation of how the development in Figure 17 is sustainable e.g. keeping money in the area by employing local staff maintaining local communities economic well-being into the future.	