Rewarding Learning

ADVANCED
General Certificate of Education
2013

Geography

Assessment Unit A2 2

assessing

Physical Geography and Decision Making

[AG221]

TUESDAY 21 MAY, MORNING

MARK SCHEME

MARK SCHEMES

Foreword

Introduction

Mark Schemes are published to assist teachers and students in the preparation for examinations. Through the mark schemes teachers and students will be able to see what examiners are looking for in response to questions and exactly where the marks have been awarded. The publishing of the mark schemes may help to show that examiners are not concerned about finding out what a student does not know but rather with rewarding students for what they do know.

The Purpose of Mark Schemes

Examination papers are set and revised by teams of examiners and revisers appointed by the Council. The teams of examiners and revisers include experienced teachers who are familiar with the level and standards expected of 16- to 18-year-old students in schools and colleges. The job of the examiners is to set the questions and the mark schemes; and the job of the revisers is to review the questions and mark schemes commenting on a large range of issues about which they must be satisfied before the question papers and mark schemes are finalised.

The questions and mark schemes are developed in association with each other so that the issues of differentiation and positive achievement can be addressed right from the start. Mark schemes therefore are regarded as a part of an integral process which begins with the setting of questions and ends with the marking of the examination.

The main purpose of the mark scheme is to provide a uniform basis for the marking process so that all markers are following exactly the same instructions and making the same judgements in so far as this is possible. Before marking begins a standardising meeting is held where all the markers are briefed using the mark scheme and samples of the students' work in the form of scripts. Consideration is also given at this stage to any comments on the operational papers received from teachers and their organisations. During this meeting, and up to and including the end of the marking, there is provision for amendments to be made to the mark scheme. What is published represents this final form of the mark scheme.

It is important to recognise that in some cases there may well be other correct responses which are equally acceptable to those published; the mark scheme can only cover those responses which emerged in the examination. There may also be instances where certain judgements may have to be left to the experience of the examiner, for example, where there is no absolute correct response – all teachers will be familiar with making such judgements.

The Council hopes that the mark schemes will be viewed and used in a constructive way as a further support to the teaching and learning processes.

Introductory Remarks

The assessment objectives (AOs) for this specification are listed below. Students must:

AO1 demonstrate knowledge and understanding of the content, concepts and processes;

AO2 analyse, interpret and evaluate geographical information, issues and viewpoints and apply understanding in unfamiliar contexts;

AO3 select and use a variety of methods, skills and techniques (including the use of new technologies) to investigate questions and issues, reach conclusions and communicate findings.

General Instructions for Markers

The main purpose of the mark scheme is to provide a uniform basis for the marking process so that all markers are following exactly the same instructions and making the same judgements in so far as this is possible. Markers must apply the mark scheme in a consistent manner and to the standard agreed at the standardising meeting.

It is important to recognise that in some cases there may be other correct responses that are equally acceptable to those included in this mark scheme. There may be instances where certain judgements have to be left to the experience of the examiner, for example, where there is no absolute, correct answer.

Markers are advised that there is no correlation between length and quality of response. Candidates may provide a very concise answer that fully addresses the requirements of the question and is therefore worthy of full or almost full marks. Alternatively, a candidate may provide a very long answer which also addresses the requirements of the question and is equally worthy of full or almost full marks. It is important, therefore, not to be influenced by the length of the candidate's response but rather by the extent to which the requirements of the mark scheme have been met.

Some candidates may present answers in writing that is difficult to read. Markers should take time to establish what points are being expressed before deciding on a mark allocation. However, candidates should present answers which are legible and markers should not spend a disproportionate amount of time trying to decipher writing that is illegible.

Levels of Response

For questions with an allocation of six or more marks three levels of response will be provided to help guide the marking process. General descriptions of the criteria governing levels of response mark schemes are set out on the next page. When deciding about the level of a response, a "best fit" approach should be taken. It will not be necessary for a response to meet the requirements of all the criteria within any given level for that level to be awarded. For example, a Level 3 response does not require all of the possible knowledge and understanding which might be realistically expected from an AS or AL candidate to be present in the answer.

Having decided what the level is, it is then important that a mark from within the range for that level, which accurately reflects the value of the candidate's answer, is awarded.

Knowledge and Understanding	Skills	Quality of Written Communication	
The candidate will show a wide-ranging and accurate knowledge and a clear understanding of the concepts/ideas relevant to the question. All or most of the knowledge and understanding that can be expected is given.	The candidate will display a high level of ability through insightful analysis and interpretation of the resource material with little or no gaps, errors or misapprehensions. All that is significant is extracted from the resource material.	The candidate will express complex subject matter using an appropriate form and style of writing. Material included in the answers will be relevant and clearly organised. It will involve the use of specialist vocabulary and be written legibly and with few, if any, errors in spelling, punctuation and grammar.	
The candidate will display an accurate to good knowledge and understanding of many of the relevant concepts/ ideas. Much of the body of knowledge that can be expected is given.	The candidate will display evidence of the ability to analyse and interpret the resource material but gaps, errors or misapprehensions may be in evidence.	The candidate will express ideas using an appropriate form and style of writing. Material included will be relevant and organised but arguments may stray from the main point. Some specialist terms will be used and there may be occasional errors in spelling, punctuation and grammar. Legibility is satisfactory.	2
The candidate will display some accurate knowledge and understanding but alongside errors and significant gaps. The relevance of the information to the question may be tenuous.	The candidate will be able to show only limited ability to analyse and interpret the resource material and gaps, errors or misapprehensions may be clearly evidenced.	The candidate will have a form and style of writing which is not fluent. Only relatively simple ideas can be dealt with competently. Material included may have dubious relevance. There will be noticeable errors in spelling, punctuation and grammar. Writing may be illegible in places.	1

Section A

Option A: Fluvial and Coastal Environments

1 (a) The candidate should present an annotated diagram or diagrams to support an explanation of the way in which dune systems are formed. Both diagrammatic material and written description are required.

Level 3 ([6]–[7])
An accurate and well-presented diagram or diagrams is presented along with a clear description of the relevant coastal processes. Depth/details are present.

Level 2 ([3]–[5])
Either the diagram/s or explanation of the creative processes is incomplete in a significant way (such as restricted depth/detail, poor quality of construction).

Level 1 ([1]–[2])
The response may lack any relevant diagram and/or the explanation may be very restricted in depth, quality or relevance. Responses using an inappropriate coastal feature should be here. [7]

(b) An appropriate description of two ways in which this stretch of coastline is subject to increasing and varied demands should be given. This may include, for example, increasing residential, recreational or industrial use with associated utilities.

Level 3 ([7]–[8])
Two ways in which the stretch of coastline presented by the resource is subjected to increasing demands are given. The response is strongly supported by information gleaned from the resource. Explicit reference is made to the 'increasing' aspect of the question.

Level 2 ([4]–[6])
Two ways in which the stretch of coastline presented by the resource is subjected to demands are given; however, restricted emphasis may be placed upon the 'increasing' aspect of the question. There is some, albeit restricted, support from resource-based information.

Level 1 ([1]–[3])
Perhaps only one way in which the stretch of coastline presented by the resource is subjected to demands is given. The 'increasing' aspect of the question may be neglected. The response may not be supported by information gleaned from the resource, or it may lack validity or clarity. [8]

(c) The candidate is asked to outline the aims of basin management within a regional scale case study of a river basin and to describe and evaluate the effectiveness of the strategies implemented to achieve these aims.

Information relating to a relevant and valid case study of a river basin at a regional scale is required.

Level 3 ([11]–[15])
The answer refers to a relevant case study example of an appropriate scale and nature. The aims of the basin management scheme are outlined with clarity. Relevant and valid strategies are described and their effectiveness evaluated strongly. A high level of appropriate detail is given. Terminology is good.

Level 2 ([6]–[10])
The answer refers to a relevant case study example of an appropriate scale and nature. Although the aims of the basin management scheme are outlined, there may be some lack of clarity and/or depth. Although relevant and valid strategies are described and their effectiveness evaluated, there may be some lack of clarity/depth. Case study detail may be restricted. Terminology may be restricted.

Level 1 ([1]–[5])
The answer may refer to a case study of an inappropriate scale or nature. One or more elements of the question (aims, description of strategies, evaluation of effectiveness) may be neglected. Case study detail may be very restricted. The response may be a cursory one. Terminology may be poor. [15] 30

2 **(a)** **(i)** An appropriate discussion of varied demands upon uses of the river and valley presented in the resources should be given including for example: domestic/residential, agricultural, industrial, energy production and leisure activities.

Level 3 ([6]–[7])
At least two varied demands are presented in the relevant context and with clarity. The response is strongly supported by specific detail/ information gleaned from the resource.

Level 2 ([3]–[5])
Although at least two varied demands are presented in the relevant context, there may be a lack of clarity. There is some, albeit restricted, support from resource-based information.

Level 1 ([1]–[2])
Only one demand may be presented or comments are not placed in the relevant context. The response may not be supported by information gleaned from the resource, or it may lack validity or clarity. [7]

(ii) The candidate should employ information from the resource along with additional material.

Level 3 ([7]–[8])
A valid and relevant explanation is given with clarity and detail Information is drawn from the resource, along with additional supporting material. The 'challenge' aspect is explicitly addressed. Terminology is good.

Level 2 ([4]–[6])
Although a valid and relevant explanation is given, clarity and detail may be restricted. Although information is drawn from the resource, along with additional supporting detail, the response may be unbalanced or lacking in depth. The 'challenge' aspect may be implicit only. Terminology may be restricted.

Level 1 ([1]–[3])
The explanation may lack relevance, validity, clarity and/or detail. The candidate may restrict their comments only to the resource or, alternatively, only to additional material. The 'challenge' aspect may be neglected. The explanation may be cursory, invalid or restricted in detail. Terminology may be poor. [8]

(b) The candidate is asked to describe the hard and soft engineering strategies which have been implemented in a valid case study location, and to state and justify their view as to which of these strategies is the most environmentally sustainable option.

Level 3 ([11]–[15])
The answer refers to a relevant case study example of an appropriate scale. Both relevant and valid hard and soft engineering strategies are described with clarity and detail. The view of the candidate is clearly stated and a strong, valid and relevant justification made to support this opinion. Appropriate details are given. Use of terminology is good.

Level 2 ([6]–[10])
The answer refers to a relevant case study example of an appropriate scale. Both relevant and valid hard and soft engineering strategies are described although, perhaps, in an unbalanced manner or with some lack of clarity or detail. Although the view of the candidate is stated and a justification made to support this opinion, either or both may lack some measure of clarity, relevance or validity. Case study detail may be restricted. Use of terminology may be restricted. Answers without specific justification, which are otherwise good can be here.

Level 1 ([1]–[5])
The answer may refer to a case study of an inappropriate scale or nature. Either hard or soft engineering may not be included.Case study detail may be very restricted. Use of terminology may be poor. [15] 30

3 (a) In this question both a description of the process of salinisation and an explanation of why the process continues to be a problem in arid and semi-arid environments is required. The process description may be in the form of a definition or alternatively the candidate may outline the development of salinisation in the soil. In either case salinisation may be viewed as a purely natural outcome or be related to human activity.
Salinisation is the process by which evaporation of water at the soil surface leads to the accumulation of soluble salts, including compounds of sodium, calcium, magnesium and potassium at or near the soil surface. This alters the soil chemistry impacting the soil fertility and its ability to sustain vegetation cover.
In the second element, it is expected that poor water management in relation to irrigation will be highlighted as the reason for increased salinisation in these regions. While no case study detail is required many candidates may make specific reference to their regional study. Poor management issues would include overuse of irrigation water raising the water table, using saline water sources and/or having inadequate drainage systems for surplus water to drain away.

Level 3 ([6]–[7])
The candidate clearly identifies the nature of soil salinisation and explains how the use of irrigation increases the risk of soil salinisation in semi-arid and arid tropical environments.

Level 2 ([3]–[5])
Both of the key elements are addressed in the answer but either the definition of the term or the explanation of its increase is incomplete.

Level 1 ([1]–[2])
An answer would be confined to this level if it does not address one of the two key elements. Full responses may be cursory or lack understanding. [7]

(b) The 'Flight of the Gibbon' tourist development has many aims; the two addressed in this question are environmental and social sustainability. Each should be addressed with relevant material from the resource at both the **local** and the **global** levels.

Environmental sustainability
Local – Described as eco-friendly with a zero carbon footprint. Protecting and re-establishing the gibbons and other primates. 10% of company profits are used for the rehabilitation of the rain forest to a healthy environment, including the planting of one million trees over 20 years.
Global – Hope to inspire tourists to engage with environmental issues at home, the zero carbon footprint may be linked to the global warming issue.

Social sustainability
Local – Work with local villagers on long term restoration and employing local people as guides for tourists, also working along with the Thai government in supporting local communities through road maintenance and working to preserve Thai culture and lifestyles. Also targets the education of local children, including the underprivileged.
Global – Education of tourists from around the world on the risks to the environment in Thailand including access to canopy locations and also to raise awareness in their home environments. Answers are expected to be more than lists of relevant phrases from the resource.

Level 3 ([7]–[8])
The candidate uses the resource to address each issue at both scales with a range of points accurately drawn from the material.

Level 2 ([4]–[6])
Both issues are addressed and the resource material is used with adequate explanation and in context. However, the differentiation of scale or the range and depth of the resource use is inadequate.

Level 1 ([1]–[3])
Little use is made of the resource or one issue or scale is not addressed with the material selected. Full answers may lack command and understanding.

[8]

(c) As a case study question a regional scale Tropical Forest should be named (often Amazon) and description and explanation should relate to the specifics of that case study. This would include reference to species of vegetation found for example.

Level 3 ([11]–[15])
The candidate describes accurately the nature of the tropical forest vegetation and the role the forest plants play in the cycling of nutrients in the context of a regional scale study and with relevant detail.

Level 2 ([6]–[10])
While all three elements of the question are addressed, one or more is not well developed in either the description detail (vegetation) or the explanatory understanding (nutrient cycling).

Level 1 ([1]–[5])
At least one of the key requirements of the question is not provided, the case study setting, nature of vegetation or its role in nutrient cycling. Where all key elements are mentioned, answers at this level will be clearly lacking in proper understanding.

[15] 30

4 **(a)** Zonal soil named as oxisol, latosol or ferralithic soil ([1]). For any two distinctive characteristics, description and explanation (2 × [3]). These characteristics may include:

Characteristic	Description	Explanation
Depth	Deep from 4 to 10 m	Ancient stable climate, deep chemical and biological weathering due to abundant heat and soil moisture
Colour	Red or Red/Brown	Dominance of sesquioxides of iron and aluminium due to severe leaching (wet climate 1800+ mm)
Profile	Shallow A horizon, deep B1 and B2	Chemical weathering, leaching due to hot, wet climate leaching and efficient extraction of nutrients
Chemistry	Acid pH around 4–4.5	Strong leaching of nutrient positive ions replaced by H^+ ions in B horizon
Fertility	Ah horizon thin, little storage of nutrients	Combination of leaching due to wet climate and the rapid transfer of plant nutrients through root systems

[7]

(b) Description and explanation required for both tropical ecosystems (2 × [4]). The description should highlight both the movement of the ITCZ and the climatic characteristics. Explanation should comment on both the thermal and rainfall impact of the shifting ITCZ.

Tropical Forest: Hot (26°C+) and Wet (1800 mm+) all year. While the ITCZ moves north following the overhead sun in 'summer' up to 12–15°N it continues to influence the Equatorial zone. The rising convectional air ensuring year round rainfall and consistently high temperatures (moderated to some extent by the cloud cover).
Desert Zone: Very hot (30°C+ in summer) down to hot (c.22°C) rest of year. The total annual rainfall is less than 250 mm with most falling in a few sporadic summer showers. The overhead sun reaches these latitudes in May to August but the ITCZ and its associated rainfall barely extends to this region giving only sporadic summer rainfall. The shorter days and lower angle of sun in 'winter', November to February, accounts for the lower temperatures compared to the longer (14 hr) summer days with high sun. [8]

(c) A relevant case study is required both in scale and a tropical forest ecosystem. The description should be specific to the management of the case study given and the attempt explained should be related to sustainability in all three senses mentioned in the quotation – economic, social and environmental.

Level 3 ([11]–[15])
The candidate addresses all three aspects of sustainability with specific reference to a relevant study. The description is accurate and the explanation of how management strategies attempt to achieve sustainability is clearly presented. Appropriate terminology and case study detail is presented.

Level 2 ([6]–[10])
A relevant case study is presented but either the detail is limited or the explanation of the attempt to be sustainable is restricted. One of the three aspects of sustainable development may be missing.

Level 1 ([1]–[5])
Answers at this level may be limited in a number of ways: a lack of descriptive case study detail or no attempt is made to identify the different aspects of sustainable development. Full answers might be cursory or lack understanding. [15] 30

5 **(a)** This is a Conservative or Transform plate margin. ([1]).
The explanation of process involves the lack of either destruction or creation of plate material. The tectonic forces in the mantle beneath along the North Anatolian Fault are convection currents moving the Asia Minor Plate and the larger Eurasian plate past each other. As no subduction takes place and no rising magma can reach the surface, extrusive volcanic activity does not occur. Rather tension along the NAF builds up over time and is released (as on the map) by fairly regular earthquake events.

Level 3 ([5]–[6])
A clear comprehension of the operation of convection in the mantle (asthenosphere) on the two plates at this margin is explained in terms of a conservative boundary. The lack of surface igneous activity is also explained with accuracy.

Level 2 ([3]–[4])
The answer has a valid but incomplete explanation of the active processes in both the upper mantle and on the surface at the plate margin. Reference to the resource may also be restricted.

Level 1 ([1]–[2])
The answer does not provide an explanation of the processes involved in the presence of seismic but not volcanic activity. [7]

(b) For each of the **two** effects both the cause, the sequence of events from the initial earthquake, and impacts of each must be explained. (2 × [4]). For high reward, ensure that there is use of appropriate terminology.
Landslides: Earthquakes cause seismic shaking that acts as a trigger mechanism for loose or unconsolidated material even on some low angled slopes. Material falls down the slopes and impacts include the blocking of roads and other transport systems, the burying of buildings or settlements, blocking of drainage leading to flooding and/or habitat destruction.
Fire: Collapse of buildings, houses, power lines or industry may initiate fires. In turn these may be spread by gas released from broken pipelines. Broken water mains often make tackling fires difficult allowing them to spread more widely. The impacts include damage to both the built and natural environments and the loss of life.
Floods: Broken water pipelines, collapsed dams and (as noted above) landslides across drainage routes may all cause flooding. All the events are the possible outcome of the energy released from an earthquake.
The impact may involve catastrophic flooding such as in the valley below a fallen dam or slower flood events such as water ponding behind a river dammed by a landslide.
Note: Candidates may use exemplar material to discuss their chosen effects. This is NOT required but may be used to effectively address the question. [8]

(c) Accurate detail of one relevant LEDC earthquake case study is required here. All three influencing factors (knowledge, perception and level of development) need to be discussed in relation to the management of the effects. It is probable that management will cover preparation for as well as short and longer term responses to the event.

Level 3 ([11]–[15])
Details of management of the effects of a relevant case study (LEDC) are provided. The role of perception, knowledge and level of development in the management are all discussed in an appropriate way.

Level 2 ([6]–[10])
Answers in which the case study detail or the discussion of the three factors influencing the management of the earthquake effects is limited in depth, are confined to this level.

Level 1 ([1]–[5])
The response lacks one of the key elements, namely any relevant case study material, or the role of knowledge, perception and level of development on management. [15] 30

6 **(a)** Social hazards and benefits are the focus of this question. While there may be some overlap between economic and social impacts it is the direct impacts on people that should form the basis of an answer. Throughout, references to places for both benefits and hazards are required. Social benefits will include land creation, resource development (mineral, fertile soil and tourist potential) and energy supply. Social hazards include the risk to life, injury, homelessness, property destruction and forced migration and displacement.

Level 3 ([6]–[7])
A range of both social hazards and benefits are described and these are adequately linked to at least two places for illustration.

Level 2 ([3]–[5])
Either the range of social hazards and benefits or the illustrative material is restricted.

Level 1 ([1]–[2])
An unbalanced answer lacking detail of either hazards or benefits would be confined to this level. An answer with a lack of relevant reference to places would be similarly restricted. [7]

(b) Only one of the two margins has to be identified and represented: A – Sea-floor spreading (mid-ocean ridge) or B – a Collision zone (fold mountains). In each case it is the active processes in the formation of the relevant landforms that forms the focus of the question and the diagram should reflect that. An annotated diagram is required along with a written explanation. The balance between diagram and writing may vary, for example a well annotated sequential diagram may require less written explanation.

Level 3 ([7]–[8])
The selected plate margin and landform is accurately identified and the processes involved in the formation clearly explained using both an annotated diagram and written material. Appropriate terminology is used throughout.

Level 2 ([4]–[6])
While the margin and landform are correctly identified and an appropriate diagram presented the explanation is restricted in its depth and detail.

Level 1 ([1]–[3])
The answer may lack an appropriate diagram and/or the explanation is inaccurate lacking accurate terminology of the processes involved. [8]

(c) A relevant small scale case study is required with a clear description of how prediction of the volcanic activity was attempted. Both the detail of these efforts and an evaluation of them in the context of the study are discussed.

Level 3 ([11]–[15])
A relevant case study is presented and accurate detail of the use of prediction of the volcanic activity is clearly provided. The success and limitations of the management is evaluated in the context.

Level 2 ([6]–[10])
A relevant case study is presented and some description of the use of prediction methods is provided. This description may have limited detail or the evaluation element may lack development.

Level 1 ([1]–[5])
The response lacks either: a relevant case study; a description; or an evaluation of the management. Full answers will be cursory or lack understanding. [15] 30

Section A **60**

Section B

Introduction: some guiding principles

7 The ideas outlined in the 'Guidance on Content' section are lines of thought that candidates might take in their report. They are not to be seen as the definitive answer, though it is to be expected that the points outlined below will feature, if only in part, in most answers. When allocating marks look favourably on answers which:

(a) avoid undue verbatim quoting from Resource Booklet and adopt a consistent style;

(b) use the full range of the resource material appropriate to the task – particularly where it is provided in non-literary format such as the printed maps and photographs;

(c) apply knowledge and concepts that are not specifically raised in the resource material, yet are both illuminating and relevant to the task;

(d) maximise opportunities presented by the resource material;

(e) appreciate that "bias" might exist in resource material which expresses particular views;

(f) avoid undue repetition of the same answer material in different sections or, if overlap is unavoidable, present it in a fresh way;

(g) back up points with specific detail, e.g. giving statistical information where it is provided rather than making vague statements when details are readily available.

Guidance on content

A. Introduction (Briefly describe the proposed project and discuss the need for it)

Plans for this airport project were announced by the British Government in March 2005. Originally to be completed by 2010, it is only now being reconsidered after having been deferred in 2008. An airport runway and terminal (Resource 7 C1) are planned for Prosperous Bay Plain. A road will link the development to Jamestown, the capital of the island. This will initially be used to get materials to the construction site, but will eventually be upgraded to allow easy access (see Artist's impression 7C2). In addition a new pier at Rupert's Bay is planned for items too bulky to be transported by air and for landing aviation fuel, needed for flights to return to airports in Africa. The cost of the airport is estimated at £300 million.

The volcanic island of St Helena is located in the South Atlantic Ocean, 2000 km from the African coast, the nearest mainland. The islanders are dependent, at present, on a ship, the RMS St Helena. This ship is the only means that the islanders have of getting goods from the outside world, or of exporting frozen or canned fish, or coffee. Islanders too rely on the ferry to get to or to leave the island. The ship cannot moor at the island and goods and people have to be transferred to get them onshore. This is inconvenient and also restricts what can be transported to the island. In addition the RMS St Helena visits the island infrequently, only 25 times each year. It also cannot be relied upon. It broke down and had to be sent for repair in 1999, prompting the residents to fear running out

of essential supplies, and causing panic buying. The sailings of the ship can also be disrupted by weather as anchoring is difficult when winds are blowing from the north-west.

Those who are in favour of the proposal argue that there is a compelling need for an airport to be built. The population of the island has been declining. With 5157 people in 1998, there were only 4225 in 2008. This number is close to making the island unsustainable. Most of these Saints, as the islanders are called, who left are young and as a result the population on the island is ageing. It is necessary to develop the airport to reduce the isolation of the remaining islanders and to bring economic opportunities to the island. The jobs created may stem the haemorrhage of the young and economically active and allow many migrants to return. The economic opportunities may reduce the need for support given to the island by the UK government, helping to make it self-sufficient.

Level 3 ([7]–[8]
The candidate clearly describes the proposed airport development and identifies the need for such a development. Both elements are included. Consideration of need may be more extensive than the description, but description is still effective and well handled. Points are backed up with relevant figures.

Level 2 ([4]–[6])
The candidate makes fewer clear and correct points. There is little or no development of any point, but points made are valid. There may be a major imbalance between the discussion of the need and the description of the project. Perhaps over-reliance on verbatim quoting in places, even though generally appropriate.

Level 1 ([1]–[3])
The candidate presents little content and a lot of it is irrelevant to the need for the development or the description of it. Some of the points made may lack validity. Excessive verbatim use of resources. [8]

B. (i) Discuss the possible beneficial effects of the proposed development on people and the economy and the counterarguments.

As the population of the island is falling, the airport development may create economic opportunities to reduce this fall, and to encourage people back to the island. Many parents are forced to leave the island for work, leaving their children to be looked after by others. This development will allow these parents to return allowing family life to return to normal. Increased opportunities for jobs will help to make the island sustainable. Many of these jobs will come from tourism, opportunities for which will open up with the opening of the airport. The construction itself will create 500 jobs, a very large number on an island of just over 4000 people. Over the 25 years after the airport has opened, employment opportunities will increase by 2000. Currently unemployment on the island is quite high, with some analysts putting it at 10%. In addition wages are very low, with an average income of just over £3000 per year.

The island currently gets a subsidy of £20 million pounds each year, largely to keep the RMS St Helena running. As Megg Munn, a Labour MP says, “the people of St. Helena do not want UK handouts” and they want to become self-sufficient.

Shelco will develop leisure and tourist facilities for tourists if the airport goes ahead. It has been suggested that £100 million could be invested, a huge sum for a tiny island. The tourism route they are following involves quite

small numbers of high-spending tourists. An exclusive resort will be developed at Broad Bottom with 120 beds and a golf course. At present 800 intrepid tourists make the journey on the mail ship. The airport will open up the island and over 50,000 are expected to arrive by 2035. At present, the tourists who arrive spend £647,000. It is anticipated that tourist spending will increase to almost £10 million by 2020. The GDP of the island will grow by 330% in just 20 years. Jobs in accommodation would increase by 389 even before the airport opens, and it is anticipated that there will be 73 new jobs in restaurants and other developments. When the airport is built, these are likely to be much larger.

Without the airport development, none of this would be possible.

Counter

While the development may bring increased employment to the island, these jobs will be unskilled and wages will be relatively low. They will be serving the extremely wealthy tourists who can afford to travel to St Helena, and stay in the exclusive resort. This will have a negative impact on the tight-knit social structures on the island. There will be few benefits to the people of St Helena, as the profits from the luxury hotel and golf course will go to the private owners of the resort and not to the islanders.

There is a suspicion that the development is not intended to improve the lot of local people, but is a mechanism to reduce the £20 million which is currently spent by the British Government on the island, largely subsidising the RMS St Helena. Some people argue that the proposal has not been taken with full consultation with local people. These people point to the fact that, of those who could vote for the proposal, only 30% of those on St Helena who could vote were in favour of the development. Most of those in favour were Saints who lived elsewhere. The islanders make up a tight community and it is feared that the influx of rich outsiders waited on by locals will create community tensions.

Opponents of the scheme also point to the fact that a ship will still be required to bring bulky items to the island, as these could not be brought by air. This ship will not be subsidised, unlike the RMS St Helena, and will have to be paid for by the islanders. This will make these bulky goods more expensive for islanders than they are now.

NB Some candidates may discuss environmental factors in this section and this is acceptable, so long as they focus on the economic and social impacts of such changes to the environment. In B (ii), should the same environmental factors be revisited, candidates should not merely repeat the information, but should treat it in a fresh way.

Level 3 ([9]–[12])
Candidate states clearly the main changes and the counterargument. At least **two** different factors should be discussed. The account will have many of these characteristics:

- The points made will be consistently relevant and logically structured
- The ideas will demonstrate insight and a level of sophistication
- Clear understanding of all concepts will be demonstrated
- Use will be made of most of the relevant resource material – no significant points will be omitted
- Figures, where available and appropriate, will be used to good effect
- Ideas will be expressed clearly and effectively

Level 2 ([5]–[8])
Candidate will have fewer lines of thought or discussion may be limited. However, while ideas may lack depth and/or detail, they are still adequate. There may be a heavy imbalance between the two sides of the argument. The account may show deficiencies in the following ways:

- Understanding displayed but an over-reliance on verbatim quoting in places, even though generally appropriate
- Resource material used but some information not as well exploited as it could be
- Largely related to the question but some irrelevant material introduced
- Ideas not expressed particularly logically or clearly

Level 1 ([1]–[4])

- Simple understanding demonstrated but sketchily dealt with
- Excessive verbatim use of resources
- Some use made of the resource material but many relevant resources omitted
- Little or no structure or logic in the ordering of content [12]

(ii) Discuss the potential environmental damage of the proposed development and the counterarguments.

Those who oppose the development argue that Prosperous Bay Plain is a habitat unique in St Helena and a sensitive ecosystem. It is important for spiders and scorpions and, as St Helena has 400 species not found elsewhere on the planet, this is particularly important. Ten species were found on the plain recently that occur nowhere else in the planet. This included spiders, a cricket, wasp and two flies. A Giant Earwig species was not found during the most recent survey but, even if that species is not resident in the area affected, it is clear that land on which the airport is to be built is rich in wildlife not found elsewhere on the planet. While a replacement habitat has been suggested, to which the threatened plants and animals can be moved, even those in favour of the development concede that its success is not guaranteed.

The Wirebird, a type of plover, is the national bird of the St Helena. These birds are falling in number with only between 200 and 220 adult birds remaining. This makes them close to extinction and, as they feed and nest on Prosperous Bay Plain, the development puts them at serious risk. Even the developers accept that the Wirebirds will be disturbed in Prosperous Bay Plain.

There is a rich architectural environment on the island with many historic 18th century buildings in Jamestown particularly and this will also be threatened by the development. Large numbers of visitors to the island will mean more demand for new building and this will inevitably threaten the character of the island, the very thing that makes it unique and attractive.

Counter

Those in favour of the development point to the steps that have been taken to help protect the environment. Around the airport there will be National Protected Areas as well as at Deadwood Plain and the Barn (Resource 7B) and this will more than compensate the habitats lost by the construction of the airport, benefiting the invertebrates and other plants and animals. Pasture will be brought back to Deadwood Plain and elsewhere to help provide further habitats for Wirebirds.

The development itself will be sensitive to the Wirebirds and will take steps to reduce the impact on the birds. The building will take place when the birds are not breeding, where possible. It is also important to note, those in favour of the development argue, that there will be no impact across the island on the Wirebirds. As there are relatively few flights landing at the airport, the birds may become used to them.

Level 3 ([7]–[8])
Candidate states clearly the main changes and the counterargument. At least **two** different factors should be discussed. The account will have many of these characteristics:

- The points made will be consistently relevant and logically structured
- The ideas will demonstrate insight and a level of sophistication
- Clear understanding of all concepts will be demonstrated
- Use will be made of most of the relevant resource material – no significant points will be omitted
- Figures, where available and appropriate, will be used to good effect
- Ideas will be expressed clearly and effectively

Level 2 ([4]–[6])
Candidate will have fewer lines of thought or discussion may be limited. However, while ideas may lack depth and/or detail, they are still adequate. There may be a heavy imbalance between the two sides of the argument. The account may show deficiencies in the following ways:

- Understanding displayed but an over-reliance on verbatim quoting in places, even though generally appropriate
- Resource material used but some information not as well exploited as it could be
- Largely related to the question but some irrelevant material introduced
- Ideas not expressed particularly logically or clearly

Level 1 ([1]–[3])

- Simple understanding demonstrated but sketchily dealt with
- Excessive verbatim use of resources
- Some use made of the resource material but many relevant resources omitted
- Little or no structure or logic in the ordering of content [8]

C. Decision (State clearly your decision and justify it on the basis of the greater overall benefits)

The recommendation may overlap with some of the points made in B in relation to the potential economic, social and environmental impact of the airport and associated developments. However, the emphasis here has to be on the greater overall benefits of developing or not developing the airport and the contrary view. In this section, for example, candidates can weigh up the relative merits of arguably damage to the environment with possible economic development and employment for local people. No mark for stating a decision alone without a justification.

Level 3 ([8]–[10])
Candidate states clearly a decision. A range of reasons are provided in justification. The account will have many of the following:

- There is evidence that the arguments of both sides are being balanced, one against the other

- Links are made between diverse aspects of resource material, not possible in B
- Points are consistently relevant and logically structured
- There is a clear grasp of the concepts used

Level 2 ([4]–[7])
There are fewer lines of thought or discussion, but what there is is relevant and correct or supportable in what is argued. There may be deficiencies such as:

- Too much verbatim quoting or overuse of quotations in full
- Important sections of resource material not utilised
- Irrelevant material introduced
- Ideas not expressed particularly logically or clearly
- Understanding of concepts not always clearly demonstrated

Level 1 ([1]–[3])

- Few lines of thought and sketchy in detail
- Large gaps in the use of resource material
- Little or no structure or logic in the ordering of the concepts [10]

Format
Clear format headings **using the headings provided** throughout [1]
Clear subheadings **using the subheadings provided** in Section B [1] [2]

Role
Role of Dr Beth Royale, advisor for DFID, adopted [1]
Role maintained [1] [2]

Graph
Reference in report [1]
Appropriateness of the technique used [1]
Accuracy of the data presented [3] (Note: all data used)
Conventions (key, labelled axes, title) [3] [8] 50

Section B **50**

Total **110**