ADVANCED SUBSIDIARY (AS)
General Certificate of Education
2012

Geography

Assessment Unit AS 2
assessing
Module 2: Themes in Human Geography

[AG121]

TUESDAY 19 JUNE, MORNING

MARK SCHEME

MARK SCHEMES

Foreword

Introduction

Mark Schemes are published to assist teachers and students in their 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 and 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 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.

General Descriptions for Marking Criteria

Knowledge and Understanding	Skills	Quality of Written Communication	Level
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.	3
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

1 **(a)** **(i)** [1] for 1–2 accurately labelled sites
[2] for 3–5 accurately labelled sites
[3] for 6 accurately labelled sites
Also:
[1] for title
[1] for label on *x* axis ⎤
[1] for label on *y* axis ⎦ units are needed
[1] for drawing accurate line connecting points   [7]
Correlation or line graph are acceptable

(ii) Candidates need to describe the relationship between the two variables. They need to clearly describe that as one increases so does the other, using accurate figures. If no figures are provided then maximum [2]. The further you move from the inside of the bend the deeper the channel becomes. Better candidates will discuss a positive relationship but this is not required for full marks.   [3]

(iii) Candidates will mostly focus on varying amounts of discharge with distance from the inside of the bend as their geographical factor. Candidates will discuss the fact that on the inside of the bend there is less discharge as a meandering river will flow to the outside of the bend. This reduction in discharge means that there will be less energy on the inside of the bend and more deposition. This produces the shallower depths. As you move away from the inside of the bend the depth increases, this is because there is more discharge, therefore more energy and thus more erosion. Maximum [2] if only one side of the bend is discussed.   [3]

(b) **(i)** 1 = 4
8 = 28
29 = 6   [3]

(ii) $2 \, (1.109) \sqrt{\dfrac{30}{194.21}}$ [1]

[1] $2.218 \times \sqrt{0.154} = 2.218 \times 0.393$ [1]

= 0.872 [2]   Acceptable range = 0.86–0.9
Distribution is significantly random [1]   [6]
Credit the correct distribution for **their** Rn value.

(iii) If the study had been narrowed to only cover the Central Dublin area the result would have become more significantly regular and the Rn value increased [1].   [3]

(c) **(i)** Stratified sampling would be most appropriate as the researcher needs a sample of data in all the subset groups. They need a representation from all regions and from males and females. Random would not work because it would possibly produce a sample with no data from one of the countries.   [3]

	AVAILABLE MARKS

(ii) Life expectancy is higher for both males and females in England. This would be the most developed area and therefore have more money for investment in health and education etc. therefore increasing life expectancy. Other reasons are acceptable.

Candidates may also offer an explanation for the higher life expectancy of women in all areas. This would be because traditionally men worked in more physical and labour-intensive jobs. Male lifestyle such as diet and smoking can also be a factor. [2]

30

Section A | **30**

6

Section B

2 **(a)** **(i)** Population distribution in Egypt is concentrated around the River Nile and its Delta. These areas have much higher population densities. As you move away from the Nile and its Delta the population densities drastically drop. Most areas away from the Nile and its Delta have population densities of below 10 people per square kilometre.
No figures, maximum [1]. [2]

(ii) DRAINAGE: areas closer to the Nile have a reliable supply of water for irrigation, cooking, washing and drinking etc. As you move away from the Nile and its Delta the availability of water is drastically reduced as you move into desert landscape, the Western Desert. Some candidates will connect this to climate.
SOIL: areas closer to the Nile and its Delta will have more fertile soil due to flooding and deposition of alluvium from the river. This will attract people as agriculture will be more successful here. Further away from the river the quality of the soil will decrease as you move into the desert landscape. The soil will be sandier and have a lower nutrient content. This will repel people as this will create a harsher environment to survive in.
Relief is also acceptable.

This list is not definitive. If candidates discuss other physical factors (e.g. relief) then mark on their merit. Candidates need to have clearly discussed **two** physical factors. These will be marked as (2 × [3]). Candidates who discuss human factors will not be credited with marks. [6]

(b) There is a wide range of problems that the candidates may discuss for problems with data collection in LEDCs. Examples include:
• Financial problems: there is a lack of money to finance the collection of the data and to also process any information collected.
• Size of area to be surveyed. Many LEDC countries cover vast areas of land and this creates problems in ensuring that all areas, especially remote rural areas, are covered.
• Gender: there are some LEDCs where men are not allowed to interview women. This creates problems in accurate collection of data.
• Religious differences: many LEDC countries have a significant number of religious groups and very often conflict exists between these groups. It is very difficult to ensure that there are enumerators from all religious divisions to reduce possible conflict situations.

This list is not definitive, merely examples, and candidates can produce other problems. Mark on their individual merit. It is essential that the candidates have given **two** problems. These will be marked as (2 × [2]). [4]

12

3 (a) (i) In 1910 the vast majority of states in the USA had a low percent of their population living in metropolitan areas. Most produced a figure of less than 50%. Only six states had a figure higher than this. By 1950 the majority of states still had less than 50% of their population living in metropolitan areas, but there had been an increasing number of states producing figures with 75% or more of their population living in metropolitan areas. By the year 2000 the pattern had completely changed and now the majority of states have over 50% of their population living in metropolitan areas.
No figures, maximum [1].   [2]

Candidates can effectively answer this question by just comparing 1910 with 2000. All three times periods do not need to be discussed for full marks.

(ii) The urban process is URBANISATION or SUBURBANISATION.
Accept rural-urban migration or urban sprawl.   [1]

(iii) There are a number of issues that the candidates may draw upon, such as:
•   Loss of green field sites. As the urban areas grow and expand they will engulf surrounding green field sites. This will reduce the amount of available agriculture land.
•   Increasing commuter traffic: as people move to the fringes of the rural/urban area many still work in the central areas of the city and commute into work. This will create problems at peak traffic times.

Candidates only need to discuss one problem that can affect the **rural–urban** fringe. If they discuss several mark all and allocate marks to the best point made. Candidates who discuss the inner city areas should be awarded no marks.   [3]

(b) The issues facing inner city areas identified in the specification are: social and economic deprivation, re-urbanisation and gentrification. Candidates do not need to address more than one aspect but those who do should have all marked and the highest mark recorded.

If discussing economic and social deprivation they need to be able to describe the levels of deprivation using a selection of social and economic indicators. Vague comments are not acceptable for Level 3. They need to produce place names and figures for Level 3.
In relation to gentrification the same applies. They need to have a clear understanding of the process of gentrification and they need to be able to produce case study specifics in relation to this process. Place names are needed for Level 3 rather than a general discussion of this process in MEDCs. Candidates who use an LEDC case study will be limited to Level 1.

	AVAILABLE MARKS

Level 3 ([5]–[6])
A detailed and well written answer that fully discusses one issue in MEDC inner cities. They discuss the issue competently in relation to a case study. They have been able to illustrate their answer with place names and with appropriate figures.

Level 2 ([3]–[4])
This is still a good answer but the depth will be less. The candidate may lack figures and case study details.

Level 1 ([1]–[2])
A poor answer that shows a very limited understanding of the issues in inner city MEDCs. There may be serious errors and the quality of communication will be poor. [6]

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4 (a) (i) From 2003–2008 there was a relatively high fluctuating rate of GDP increase, peaking at 7%. From 2007–2009 there was a dramatic drop in the rate of increase, reaching the lowest level of 3.6%. After 2009 the rate of increase is predicted to rise [3]. Maximum [2] if no figures are used. During the period of higher increases in GDP the rate of development would be faster as more money would be available for investment in industry, education and health care. However, during the period of lower growth the rate of development would slow as there will be less money available for investment [2]. [5]

(ii) The candidates need to describe and explain a **social** measure of development. For the description they need to do more than name a measure, it needs to have a description. [1] for only identifying a measure. They need to demonstrate an understanding of the effectiveness of their measure either through the benefits or problems associated with the named measure. They are not required to have both the problems and benefits in their answer for full marks ($2 \times$ [2]). [4]

(b) Colonialism is the direct control of one country over another. There are a range of negative effects which they may discuss. Examples include: the establishment of monoculture, the closure of manufacturing industries and the slave trade. However, candidates could also discuss a positive effect, such as the improvement in infrastructure. Only one effect is needed; if candidates describe several, mark all and award the best mark.
The effect can be on either the colonial power or the colony. [3]

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Section B	**36**

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Section C

5 This question asks the candidates to look at social, economic and political implications of differing dependency ratios in MEDCs and LEDCs. Do not expect all three for both MEDCs and LEDCs but they must be included somewhere in the answer. If candidates only discuss their implications on MEDC or LEDC, maximum Level 1.

Candidates need to have a clear understanding of the fact that MEDCs have an aged dependency ratio while LEDCs have a youth dependency ratio. The implications they may discuss might include:

MEDC
ECONOMIC: provision of pensions for the increased number of elderly, reduced taxes from the falling number of economically active, increased burden on the economically active, stagnation in the housing market, increased costs or caring for people who are infirm and incapable of looking after themselves, a division in the elderly over those surviving on state pensions and those surviving on private pensions.
SOCIAL: increased need for care of of elderly people, reduced numbers available to work in army or National Health Service so reduced quality of service.
POLITICAL: growing debate over issues such as euthanasia.

LEDC
ECONOMIC: there will be increased funding needed for young facilities and services, such as maternity wards and primary schools (this is on top of an already overstretched economy), increased numbers of people looking for employment.
SOCIAL: increased malnutrition as scarce food resources are stretched even further. A higher infant mortality rate may then occur.
POLITICAL: inability to provide for the increased number of young people may create political unrest and conflict.

Level 3 ([9]–[12])
A very good answer that clearly identifies the differing dependency ratios in LEDCs and MEDCs and offers economic, social and political implications. Their answer shows a detailed understanding of the concepts discussed and terminology is good.

Level 2 ([5]–[8])
Still a good answer but the depth of knowledge on the implications may be less and either the LEDC or MEDC may be very poorly addressed. Candidates who omit economic, social or political implications completely will be restricted to this level.

Level 1 ([1]–[4])
Answers with serious inaccuracies or lacking an understanding of the question will be included in this level. [12]

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6 **CHOICE A:** The candidates need to have named a specific regional development agency working in a remote rural area and outline how this agency has tried to deliver economic regeneration. They need to have all the depth associated with a case study producing place names and figures. Better candidates will offer some discussion how successful this agency has been, but this is not necessary for Level 3.

Level 3 ([9]–[12])
A very good answer that has named a regional development agency working in a remote rural area. They have clearly identified how this agency aimed to bring economic regeneration. They have produced case study specifics and the quality of communication is good.

Level 2 ([5]–[8])
Still a good answer but the depth of knowledge on either the workings of the regional development agency or the case study is less or candidates with no case study will be limited to this level.

Level 1 ([1]–[4])
A poor answer that lacks key elements of the question and depth of knowledge is very poor. Quality of communication could be poor or limited.

CHOICE B: The candidate needs to name a protected area and outline with case study specifics how this area has been managed. They need to outline how this management has catered for the needs of conservation, recreation and tourism within their protected area. Place names and, where appropriate, figures are expected for Level 3.

Level 3 ([9]–[12])
A good answer that has named a protected area. They have clearly identified how this area has been managed for conservation, recreation and tourism and have discussed all three. They have produced case study specifics and the quality of communication is good.

Level 2 ([5]–[8])
Still a good answer but the depth of knowledge may be less. Candidates who do not discuss one of the management issues (recreation, tourism or conservation) will be limited to this level. Candidates with poor case study will be limited to this level.

Level 1 ([1]–[4])
A poor answer that lacks key elements of the question and depth of knowledge could be very poor. Quality of communication is poor or limited.   [12]

AVAILABLE MARKS
12

7 Globalisation can be defined as a process in which national economies are becoming more and more integrated into a single global economy. Actions and decisions taken in one part of the world have knock-on effects in other parts. Within the process of globalisation there are winners and losers. The effects of globalisation include:

- Candidates may discuss the effects of transnational companies (both positive and negative).
- In social and cultural terms, globalisation is causing a movement towards a global society and a global culture. People across the globe share the same musical tastes, television programmes, films and also ideas. A criticism of globalisation is that it is Westernisation in just another guise. It is Western values and traditions that are dominant.
- As the global economy develops the negative environmental effects of industrialisation are becoming apparent on a worldwide scale. For example, global warming and acid rain are having an impact across national boundaries.

Trade is the exchange of goods from one country to another. Countries import what they need and export what they produce. The effects of trade that they may discuss are:

- LEDCs are in a position where they are exporting mostly raw materials and import mostly manufactured goods. The effect of this on development is that these countries have to pay more for their imports than they receive for their exports. This means that they have little money left for investment into education and health care. Development will be slow.
- Many LEDCs rely on the export of one raw material. This creates problems because if there is a bad harvest in a particular year then the countries receive less income through their exports. Furthermore, the price of raw materials fluctuates from year to year which means that the income for such exports will be adversely affected. Development will be slowed.

The above lists are not definitive and candidates' answers should be marked on merit. Both issues (globalisation and trade) need to be discussed but there does not need to be a balance. Maximum Level 2 if no definitions given.

Level 3 ([9]–[12])
A detailed answer that has a solid understanding of the main concepts involved. They clearly understand the negative and/or positive effects that these issues bring to LEDCs. Terminology is good.

Level 2 ([5]–[8])
Still a good answer but the detail may be less. Candidates who leave out one issue completely should be limited to this level with suboptimal marking. Maximum [6].

Level 1 ([1]–[4])
A poor answer that lacks a good grasp of the issues being discussed. Answers that focus solely on defining the terms and have no discussion of the effect on development should be limited to this level. [12]

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Section C	**24**
Total	**90**