Rewarding Learning

**ADVANCED SUBSIDIARY (AS)**
**General Certificate of Education**
**2016**

# Geography

## Assessment Unit AS 2

*assessing*

## Human Geography

**[AG121]**

**THURSDAY 16 JUNE, MORNING**

# MARK SCHEME

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## 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

AVAILABLE MARKS

**1 (a) (i)** –3
9 [1]

**(ii)** $1 - \frac{6 \times 28}{2197 - 13}$ [1]

$1 - \frac{168}{2184}$ [1]

1– 0.08 (0.076)
$R_s$ = 0.92 (Accept 0.916–0.928) [1]

**(iii)** The result shows a strong positive relationship and is significant at the 99.9% level. It is clear that this result did not occur by chance. [2]
Any two valid statements get [2].

**(iv)** The countries with the higher GDPs consume more energy because the population in these countries will have a higher demand for household items that require electricity, for example televisions, fridges, washing machines, etc. There will also be higher rates of car ownership, again consuming more energy. The populations in these countries have higher disposable incomes that can be used to buy energy-consuming products. The countries with lower GDPs will have less disposable income to spend on such items and hence a lower energy consumption rate. [2]

**(b) (i)** The country that consumes the most oil: USA
The country that produces the most oil: Saudi Arabia [2]

**(ii)** The technique used to illustrate the global consumption of oil is a choropleth map. [1]

**(iii)** The limitations should only be for the technique in general not for this particular resource.
CHOROPLETH LIMITATION: this technique can often use large categories in the key and this can be misleading. It gives no indication of regional patterns within the given areas. It implies sharp boundary changes, which is unlikely. [2]

**(iv)** The population data would be useful to help establish if the countries with the higher rates of consumption have higher total population numbers as this would have impacted on their consumption levels. Are they consuming higher levels simply because there are more people living there? We could also establish if the countries with lower consumption levels are consuming less because they have fewer people or are there other reasons that need to be considered to answer this. A fact or figure from Resource 1C must be given for [3]. [3]

| | | |
|---|---|---|
| | | **AVAILABLE MARKS** |

**(c) (i)** Systematic: the candidates could stop at regular intervals along the path of the river. This would ensure that they collected data from the entire length of the river and avoid clustering.
Pragmatic: the students would have to consider the health and safety of site selection. They could decide to include or exclude sites based on the safety considerations in the field.
Stratified: this method could be used because there are subsets that need to be represented in their data. They need to ensure that data is collected from the upper, middle and lower course to allow them to fully test their hypothesis.
Random sampling could not be justified as it could lead to the clustering of sites which would reduce the effectiveness of their data.
[1] for identification of appropriate technique. Up to [2] for explanation.
[3]

**(ii)** The mean is a good indicator of the overall pebble size at each site, however, it hides any extreme values that may have been observed and the mean would be affected significantly by these extreme values. It does not tell us anything about the range of pebble sizes that were observed. [2]

**(iii)** [1] Title
[1] Labelled axis
[1] Completed key
[3] Accuracy [6]

**(iv)** The students would accept the hypothesis because the pebbles become smaller and more rounded as you move downstream. The pebbles become smaller and more rounded due to erosion as they have been transported down the course of the river. The pupils should discuss that attrition, abrasion and hydraulic pressure will be making the pebbles smaller as they are transported downstream. For [3] there must be at least one named erosion process. [3] 30

**Section A** **30**

## Section B

AVAILABLE MARKS

**2 (a)** In 1985 the USA, Canada, Russia and Australia had 20–29% of their population aged 0–14. This was the same for most of Europe. South East Asia had a large number of countries with 30–39% of their population aged 0–14. Most of S. America had 30-39% of their population aged 0–14. There were very few countries with over 50% of their population aged 0–14.
By 2010 the USA and Canada had seen a reduction in their population aged 0–14 to fewer than 20%. This was the same for Russia and Europe. South American countries all saw a reduction to 20–29% of the population. China saw a reduction to under 20%. Africa is the only continent that saw several countries increasing their percentage of population aged 0–14. The increases saw many African countries now having over 50% of their population aged 0–14.
Most continents have seen a reduction in the percentage of the population aged 0–14 but Africa has seen increases. Candidates need to have identified both trends, if one is missing, maximum [2]. If no figures are given maximum [3]. [4]

**(b)** Candidates need to write about one social implication. Do not award marks to those candidates who discuss economic implications. Those who write more than one social implication – mark both and award the higher mark. Candidates could write about the following or any other valid implication:
SOCIAL: increased manufacturing of elderly products, reduced numbers available to work in the army or National Health Service so reduced quality of service, increased conflict between pensioners who have private pensions and those who do not – creating a two-tier class of pensioners. [4]

**(c)** The crude birth rate is the number of births per year per thousand of the population [1] while crude death rate is the number of deaths per year per thousand of the population [1]. The dynamics of these two variables can cause a population to increase or decrease. If the birth rate is higher than the death rate then the population will experience natural increase. If the death rate is higher then a natural decrease will occur. [2] [4] 12

**3 (a)** **NEGATIVE EFFECTS:**

- The ethnic characteristics of Harlem are changing. There has been a reduction in the Black/African American and Hispanic populations. These groups are being forced out and the percentage of White population is increasing. This can also been seen in the poster in Hackney stating that “as the yuppies move in, locals are forced out”. The local people cannot afford to pay the new higher house prices or rents.
- The increase in house prices can be seen clearly in Hackney. House prices have risen by 319%. Due to the increased economic status of people moving into these areas the house prices are rising; the local population cannot afford to pay these and are forced to leave their area to make way for more wealthy people to move in.
- In Lexington Avenue many of the long-standing local businesses are being forced to close down or relocate. As the property developers buy up this land they have increased the rents to these businesses by $3000.

**POSITIVES:**

- Old abandoned sites have been redeveloped. These abandoned buildings were an eyesore and dangerous. They affected the visual environmental quality of the area. Cundy Tavern has been redeveloped

AVAILABLE MARKS

into modern apartments, thus improving the visual quality of the area and providing accommodation in a prime location. People can live in this area and utilise many of the amenities of Inner London.
The candidate must have addressed two negative and two positive effects of gentrification and used the resource but do not look for a balanced answer. If one resource is neglected entirely maximum [6]. If no resource use, maximum [4].
(2 × [4])

**(b)** Rapid urbanisation has been one of the most pressing issues facing practically all LEDCs in the last few decades and there is little sign that the problems are diminishing. The main issues the students could outline would be:
economic activity, service provision and the growth of informal settlements.

- Economic activity: migrants arrive in the city with few of the necessary skills required for the limited number of jobs available and are very often unsuccessful in finding employment. The demand for jobs outstrips the supply. The lack of formal sector jobs has driven many into eking out an existence in the informal sector.
- Service provision: the large number of people moving into the cities puts added demands on essential services such as clean water, sewerage, waste disposal, health care and education.
- Growth of informal settlements: many of the migrants end up living in shanty towns with limited access to the most basic requirements of life – shelter, clean water, etc. These settlements are built using whatever materials are available – corrugated iron, timber, etc. The people living in these settlements have no legal rights. It is the absolute increase in the numbers of people living in such settlements that poses the greatest challenge to urban authorities.

If no reference to a case study, maximum [3].

Candidates need to outline only two issues; for those who outline more treat as rubric. Mark as 2 × [2]. [4] 12

**4** **(i)** In 1940–69 the number of McDonald's restaurants in the world was very small and they were only opened in the USA and Canada. By 1970–1974 they had now opened in Australia and a lot of European countries. 1975–1979 saw further restaurants opening in more European countries, and the first opening in South America. From 1980–89 more restaurants opened in more South American and Central American countries. From 1990 we can also see that McDonald's has also opened restaurants in Russia and many South East Asian countries. The first restaurants in Africa opened since 1990 but only three African countries have opened McDonald's restaurants. It remains the continent that has the least number of McDonald's restaurants. This map clearly shows that McDonald's restaurants are spreading around the world and an increasing number of countries now have a McDonald's restaurant. This shows globalisation. [4]
If candidates only describe the map, maximum [3].

**(ii)** Within the process of globalisation there are winners and losers.
The effects of globalisation include:

**POSITIVE:**
- Candidates may discuss the positive effects of transnational companies (increased employment opportunities, multiplier effect, improved infrastructure, etc.).

- Consumers have a greater access to a wider range of products, from clothes to food. This gives people more choice.

**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. This has led to an erosion of cultures and national identities. Some refer to this as the Westernisation of the world.
- The candidates may also discuss the negative effects of transnational companies (long hours with little pay, profits returning to the headquarters, lack of environmental regulation, etc.).

This list is not definitive. Mark the answers given on individual merit.
Mark as 2 × [3]. [6]

**(b)** There are a range of negative effects of colonialism which the candidates may discuss; examples include – the establishment of monoculture, the exploitation of resources, the closure of manufacturing industries and the slave trade. The candidate must choose one effect and link this to the effect on development. If not done, maximum [1]. [2]

| AVAILABLE MARKS |
|---|
| 12 |
| **Section B** **36** |

## Section C

AVAILABLE MARKS

**5** Candidates need to answer the question using a national case study. This can be either a LEDC or MEDC. They must have a clear case study with details and depth of knowledge. There should be identifiable variations in space and a clear understanding of how the structure in each location is different, with figures quoted. Each location should have a clear description of the population structure and offer a valid reason for this structure. If no figures are given, maximum Level 2.

Candidates who merely describe the population structure differing over space with no explanation should be marked suboptimally at maximum [6]. Candidates who focus on changes over time or distribution will only achieve Level 1.

**Level 3 ([9]–[12])**
Candidate has an appropriate case study with details and depth of knowledge. They can describe, using place and figures, how the population structure of their case study changes over space. They offer valid reasons for the changes outlined and there are clear identifiable contrasting locations given. There is good use of geographical terminology and the quality of language is good.

**Level 2 ([5]–8])**
Still a good answer, but the depth of detail may be less. The locational information may be limited with some inaccuracies.

**Level 1 ([1]–[4])**
A poor answer that has inaccuracies and limited depth of knowledge relating to the question. Candidate demonstrates little knowledge of population structure varying over space. Also, candidates who discuss variations over time or population distribution will be limited to this Level. Terminology may be poor. [12] 12

**6** The syllabus highlights population change and service provision as the main issues faced in remote rural environments so candidates will focus on these. Remote rural areas are affected by out migration especially by the young and economically active age groups. This leaves behind an elderly population structure. With falling population numbers and an increasing ageing population some services are no longer viable, e.g. primary schools close, post offices close, public transport services are reduced or withdrawn in some cases. Consequently, the area becomes even more isolated, which leads to even more out migration and the area goes into a downward spiral of neglect. Candidates have to identify and describe at least two problems and they must discuss them with reference to place for illustration.

**Level 3 ([9]–[12])**
A detailed answer that has given at least two full issues faced in remote rural environments and has connected these to place(s) for illustration. The candidate demonstrates a solid understanding of remote rural area issues with good geographical terminology. Candidates may not write about two issues but more, but with less detail. This is also acceptable for Level 3.

**Level 2 ([5]–[8])**
Still a good answer, but the depth of knowledge is less. Candidates who fail to use place for illustration will also be restricted to this Level.

| | AVAILABLE MARKS |
|---|---|
| **Level 1 ([1]–[4])**<br>A poor answer that shows little understanding of the issues faced in remote rural environments. Candidates who use an inappropriate spatial context, that is, not remote rural, will also be restricted to this level. [12] | 12 |
| **7** Until the 1990s the focus of development was on the creation of wealth; however, in 1990 the UN defined development as a process "that creates an environment in which people can enjoy long, healthy and creative lives". The emphasis moved towards people and their quality of life. This does not mean that wealth creation is not important, but rather shifts the emphasis towards the benefits that wealth can bring to people. This means that the measures we use to measure development have had a shift in focus too. Pre 1990 the focus was on economic measures, today we use a variety of economic, social and environmental measures. The candidate should look at at least two of these measures and effectively discuss them. Candidates who only deal with either the definition or measurement of development should be marked out of 6 in Levels: Level 3 [5]–[6], Level 2 [3]–[4], Level 1 [1]–[2]<br><br>**Level 3 ([9]–[12])**<br>The candidate has clearly outlined at least two indicators of development and has related this to the measurement of development. They have addressed the issue of defining development and related this to place(s). They have a good understanding of the issues involved and the quality of communication is good.<br><br>**Level 2 ([5]–[8])**<br>A less detailed answer that may simply describe a range of indicators with little reference to the problems of defining development. Candidates who discuss only one measure will be limited to this level.<br><br>**Level 1 ([1]–[4])**<br>A poor answer with inaccuracies and lacking focus on the question set.<br>There is limited knowledge of the use of indicators to measure development.<br>Reference to place is absent. [12] | 12 |
| **Section C** | **24** |
| **Total** | **90** |