ADVANCED SUBSIDIARY (AS)
General Certificate of Education January 2013

## Geography

## Assessment Unit AS 2

assessing
Human Geography
[AG121]
MONDAY 21 JANUARY, AFTERNOON

## MARK <br> SCHEME

## 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.

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.

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

## Section A

1 (a) (i) 4
6
19
[3]
(ii) $77.28 \times 2=154.55$
$154.55 \times \sqrt{\frac{62}{691030}}[1]$
[1] $154.55 \times 0.009471$ [1]
$=1.46$ accept $1.45-1.46$ [4] for everything correct
With 62 points 1.46 indicates a significantly regular pattern [1]. This means that the hypothesis can be accepted. [1]
(b) Most students will discuss the influence of area on the Rn value. They should be able to effectively describe that a larger area will produce a more clustered result. Geographical factors are also acceptable.
If no explanation of factor, [1]
(c) (i) Canada $=80-100 \%$
(ii) Choropleth mapping
(iii) The two main limitations will be:

1. Oversimplification will have occurred. This technique presents an area or region as having a uniform value range and therefore fails to present possible intra-regional variations.
2. Maps often provide striking contrasts at regional boundary zones, which can be unrealistic.

The advantages would include: it is very easy to read and a very good visual representation of the data.
(3 $\times$ [2])
(d) (i) 100000-149999 = 10.1 accept 10 [1]

150000 and above $=6.8$ accept 7 [1]
(ii) [1] for each correctly labelled and drawn income group.
(4×[1])
(iii) There has been a reduction in the percentage of people earning less than 10000 dollars. The percentage of people earning 10000 to 24999 has also been reduced. [2] However the percentages of people found in the highest three categories have increased. [2] If no figures mentioned or no units specified, maximum [3]

Section A

2 (a) (i) All the countries have experienced growth in their percentage of high aged dependants. [1] Japan has experienced the most growth, rising from $5 \%$ in 1950 to $40 \%$ in 2050 (predicted). France has seen slow growth, rising from $12 \%$ in 1950 to $25 \%$ in 2050. [2]
No figures, maximum [2]
(ii) MEDCs are currently experiencing an aged dependency. There are several economic effects of this:

- Health care provision is funded through the contributions of those still in employment. As that sector of the population is getting smaller and they have to fund the health care of a growing elderly population, it is easy to see that the health service will not be able to cope.
- All pensioners are entitled to a state pension. It is clear that as the percentage of pensioners grows state pension funds are stretched and for those who depend on it solely for an income there is considerable hardship.
- With a falling birth rate and an ageing population some MEDCs will fall below replacement level. In other words their population will decrease. In the UK at present there are insufficient workers to fill all the skilled and unskilled manual jobs.
Those who offer social implications, no reward [0].
Only one implication, maximum [2]
(b) There is a range of problems in collecting such information in both LEDC and MEDC, however, the problems are greater in LEDCs. In LEDCs there are many problems - examples include the sheer size of some countries, language problems, gender issues, funding problems and training problems etc. The problems of MEDCs include new housing not included in some maps, misreporting of age etc. Candidates must have a clear understanding of the problems in LEDCs and MEDCs and the increased difficulty in LEDCs.
No comparison made, maximum [3]
If only MEDC or LEDC discussed, maximum [3]

3 (a) (i) There appear to be fewer services available in the remote rural areas of Australia, as illustrated in the Resources. The number of residents per health worker in very remote areas is consistently higher in all types of service than in the major cities. The number of pupils per teacher is much higher in very remote areas, reaching 23 compared to 17 in the major cities. The percentage of dwellings with access to broadband is greater in the cities. In the major cities $34 \%$ of dwellings have no Internet connection whereas this is $47 \%$ in remote rural areas and $59 \%$ in the very remote rural areas. All three resources must be mentioned for maximum [5]
One Resource missing, maximum [4]
Two Resources missing, maximum [2]. No figures, maximum [4]
(ii) General reference to place is needed for this answer. They also need to discuss one other factor so those who discuss transport and service provision should not be awarded marks. Students should write about change in population but any valid point should be marked on merit. If no reference to place is made maximum [3].
If the answer is not on remote rural areas, no reward [0]
(b) There are a number of different categories of protection for specific types of environment. The most common are Special Scientific Interest (SSIs), National Parks and Areas of Outstanding Natural Beauty. Candidates will be able to name these protective measures and have an understanding of how they contribute to management of the countryside.
If protection agencies are just named without description, maximum [1]
If either conservation or recreation missed entirely, maximum [2]

4 (a) (i) Botswana has consistently had lower GDP per capita than the rest of the world but higher than that of the rest of Sub-Saharan Africa. The pattern of change is also different. Botswana has consistently experienced growth in its GDP from 1985-2000, starting at 2200 US dollars and reaching 4100 US dollars in 2000. However, the rest of Sub-Saharan Africa has experienced little growth in its GDP. Its rate of change has roughly been constant. Compared to the rest of the world it also appears that Botswana has experienced a higher rate of growth in its GDP per capita.
No figures or units, maximum [2]
(ii) As we can see from the resource Botswana has had a very positive trade balance for most of the time period shown. This means that their exports have exceeded their imports. Botswana is earning more from its exports than its imports cost. They are selling more products than they are buying, hence producing money. This money can then be used for investment in services, such as health care, improving infrastructure and quality of life for the people of Botswana. Therefore it will have increased the levels of development in Botswana. No reference to effect on development, maximum [2]
(iii) GDP per capita is an average value and will thus hide extremes within the population. Furthermore, development means more than economic growth. There are also environmental and social considerations; however, these are not measured with GDP. The question asks for limitations so those who only state one problem should be limited to maximum [2].
(b) Colonialism is the direct rule of a country and its people by another country. Neo-colonialism (or dependency) is where a foreign former colony has political independence but is still tied economically to its former colonial ruler either through matters such as aid packages or trade agreements. If one aspect only discussed, no reward [0]

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 periods of time and a clear understanding of how the structure in each period changed. Each time period should have a clear description of the population structure at that time and offer a valid reason for it. Candidates who merely describe the population structure changing over time with no explanation should be marked sub-optimally at maximum [6]. Candidates who focus on changes over space or distribution will only achieve Level 1. No reference to population pyramids, maximum [6]. No reference to structure, maximum Level 2.

## 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 has changed over time. They offer valid reasons for the changes outlined and there are clear, identifiable periods of time.

## Level 2 ([5]-[8])

Still a good answer but the depth of detail may be less. Dates and figures may be limited with some inaccuracies.

Level 1 ([1]-[4])
A poor answer. There is limited understanding of the question set and quality of language is poor.

6 Rapid urbanisation has been one of the most pressing issues facing practically all LEDCs in the latter half of the twentieth century and there is little sign that the problems are diminishing. The main issues the students will discuss will 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, sewage, 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.


## Level 3 ([9]-[12])

There is a very detailed discussion on the issues of rapid urbanisation in LEDCs. They have discussed their issues with reference to place with factual and specific case study details. At least two issues have been fully discussed.

## Level 2 ([5]-[8])

Candidate provides a general but accurate description of the issues. Their reference to place may be poor or lacking any depth. Candidates who only discuss one issue but have done so well may be limited to this level.

## Level 1 ([1]-[4])

A very limited answer that demonstrates only limited understanding of the issues being experienced. There is a lack of relevant information provided.

7 Any relevant national case study is acceptable. Candidates will need to describe and explain the regional contrasts in development that exist in their national case study. Their description should include a range of social and economic development indicators that show a clear difference in the level of development within their case study. As ever, the requirements of a case study must be met i.e. detail about a real place. The regional variations have to be explained again with specific detail on places.
Candidates who only describe regional contrasts in development will be marked sub-optimally: maximum [6]

## Level 3 ([9]-[12])

Contrasts in the level of development will be described effectively and accurately using precise numerical and place information. Development indicators have been described. The explanation of the variations will be specific and detailed, physical and human factors will be discussed. Quality of written communication is of a high standard.

Level 2 ([5]-[8])
Candidate provides a general but accurate answer but there is less factual detail and depth throughout or one aspect is only dealt with in a superficial manner.

Level 1 ([1]-[4])
Candidate provides a limited answer which is lacking in detail and depth on all aspects or there may be incorrect information. Reference to case study material may be limited, inaccurate or omitted altogether.

## 24

90

