## ADVANCED SUBSIDIARY (AS)

General Certificate of Education January 2012

## Geography

## Assessment Unit AS 2 <br> assessing <br> Human Geography

[AG121]
MONDAY 30 JANUARY, AFTERNOON

## MARK <br> SCHEME

## 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.

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 and 9
(ii) $\mathrm{R}=1-\frac{6 \Sigma d^{2}}{n^{3}-n}$

$$
\begin{aligned}
& =1-\frac{6 \times 50}{14^{3}-14}[1] \\
& =1-\frac{300}{2744-14} \\
& =1-\frac{300}{2730}[1] \\
& =1-0.1099[1] \\
& =0.89[1]
\end{aligned}
$$

This figure is statistically significant [1]. This means that this result did not occur by chance and that if we were to collect this data for 14 other countries it is $99.9 \%$ certain we would get the same outcome [1].
(iii) As GDP increases the life expectancy in that country also increases. This is because as the wealth of the country grows there is more money available for investment in health care and consequently the death rate will fall. Also as the GDP increases there is a higher standard of education available to the population. People are more aware of infection and spreading infections and tend to have a better lifestyle. This will also increase the life expectancy. Only one valid point needed. Description only [1]
(b) (i) Choropleth; accept dot map
(ii) [1] for an appropriate key

Marks for technique are:
[4] for 14 correctly shaded countries
[3] for 9-13 correctly shaded countries
[2] for 5-8 correctly shaded countries
[1] for 1-4 correctly shaded countries
(iii) The candidates need to fully describe a limitation of their chosen technique. Most will discuss the fact that sharp boundaries and their abrupt changing values do not exist in reality and values tend to change gradually.
(c) (i) $9 \%$ (Accept 8\%-10\%)
(ii) $13 \%$ (Accept $12 \%-14 \%$ )
(iii) From the resource we can see that in LEDCs there has been an increasing percentage of the world's population living in these countries. Latin America and the Caribbean changed from $6.5 \%$ to $8.6 \%$, Africa from 8.9\% to 13.2\% and Asia and others from 16.5\% to 21.3\%. However, the trend in MEDCs has been the reverse. These countries are experiencing a decline in their percentage of the world population [3]. Maximum [2] if no figures are quoted.
(iv) For the increasing percentage of people living in LEDCs the candidates will most likely identify the high birth rate and falling death rates in these countries leading to a fast rate of population growth [1].
[2] for explanation.
Or
For the decreased percentage of people living in MEDCs most will identify the falling birth rates and the very low population growth rates [1].
[2] for explanation.
(d) Early seral stage $B$

Slip-off slope D
Flood plain C

2 (a) (i) In all of the countries there has been an increase in the percentage of the population above 65 between 2010 and 2040 [1]. Some countries have experienced higher rates of change than others. The highest increase was found in Singapore increasing from 9\% of the population to $33 \%$. The lowest increase was in the UK, increasing from $16 \%$ to 25\% [2].
(ii) The question specifically asks for one economic impact so do not credit students who discuss a social impact.

- According to government figures, care for the elderly alone is calculated at $£ 1.6$ billion. 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.
[3] for any one valid economic implication. Candidates who discuss several factors should have all marked and the highest score allocated.
(b) The census is a count of all of the population and those social and economic characteristics that can easily be counted. Vital registration is the official recording of all births, marriages and deaths. The question asks the candidates to distinguish between the two sources so some difference needs to be discussed.
Most candidates will distinguish between the two by discussing the time element. Vital registration is an ongoing process, continuously collected; however, the census is collected every ten years. [2]
Candidates need also to discuss why population data collection is more effective in MEDCs. There are a number of points they may discuss to illustrate the cause of this. They can gain full marks by answering this question by describing the problems in LEDCs. Some examples they may include are: literacy problems in LEDCs; cost of collecting and administrating this data; wars and civil unrest in LEDCs etc. [4]

3 (a) (i) There is a clear correlation between the areas of high economic deprivation and health deprivation. Most areas which score poorly in both these indicators are in the North West in the inner city area. Wards with higher values are in the South and East. For example Allerton Stunts Cross has a low level of employment deprivation and also for health deprivation, whereas Yew Tree scores high for both indicators.

Candidates who simply describe both resources, maximum [4].
(ii) Candidates need to identify one indicator, other than employment or health deprivation. This factor can be either social or economic. They must identify the factor [1] and describe it [2]. They need to have specifics for their chosen case study, those who do not, maximum [2].
(b) The question asks for the students to describe only one issue that has arisen as a result of rapid urbanisation in the LEDCs. Any student who outlines more than one should have all marked and the best mark awarded. They may discuss:

- Economic activity: migrants arrive in the cities with few of the necessary skills required for the limited number of jobs available and are very often unsuccessful in finding full time employment. The pace of urbanisation is such that the demand for jobs rapidly outstrips the supply.
- Service provision: the large number of people moving into the cities puts added demands on essential services such as clean water supply, sewage, waste disposal, health care and education. These services require money and expertise and these are often not readily available.
- Growth of informal settlements: in such settlements the poorest people live and many do not have access to the most basic requirements of life - shelter, clean water etc. These settlements are built using whatever materials are available - corrugated iron, timber, even plastic sheeting. They are not served by services, although at times a few basic services may be provided. The people living in these informal settlements have no legal right to occupy the land and local authorities do forcibly remove them on occasions.
This is not a definitive list and candidates' answers should be marked on merit [4]. They are also required to do this through a case study; those who do not will gain maximum [2].

4 (a) (i) France had a very extensive distribution of colonies in Africa in 1914 [1]. However, it also had colonies in Asia, North America, South America and the Pacific [1].
(ii) Candidates need to give one positive effect for the ruling countries [2] and one negative effect for the colonies [2]. Those who do not follow this pattern, for example giving two positive or two negative, will gain maximum [2].
Negative effects on the colonies may include: impact on the economy, encouraging the production of raw materials and not encouraging industrial development; the introduction of monoculture and the effect of fluctuating prices; many countries lost economically active population through the slave trade; the creation of territories often resulted in tribal homelands being divided up between two or more European nations, after independence many countries have experienced bitter ethnic violence or civil war [2].
Positive effects for the ruling country may include: prestige, a supply of raw materials for manufacturing in the homelands and a supply of labour. Candidates may discuss factors that are not in the lists above and should be marked on merit [2].
(b) Any relevant national case study is acceptable. Candidates will need only to describe the regional contrasts in development that exist in their national 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 described with specific detail in places.

## Level 3 ([5]-[6])

Contrasts in the level of development will be described effectively and accurately using precise numerical and place information. A range of indicators have been outlined, with the use of figures. Quality of written communication is of a high standard.

## Level 2 ([3]-[4])

Candidate provides a general but accurate answer but there is less factual detail and depth throughout. The answer may be limited to a description of regional variations in their chosen case study with no use of figures.

## Level 1 ([1]-[2])

Candidate provides a limited answer which is lacking in detail and depth or there may be incorrect information. Reference to case study material may be limited, inaccurate or omitted altogether.
$\square$

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.

## 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 The specification lists greenfield developments, suburbanisation, counterurbanisation and transport infrastructure as the issues in the ruralurban fringe that need to be studied. Candidates should be able to discuss these issues. There does not need to be balance in the issues discussed but three need to be included. They should be able to demonstrate their issues by referencing place for illustration. Any other valid issues may be marked on merit. If candidates discuss more than 3 issues then all should be marked and the better 3 issues awarded marks.

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

Candidate shows a detailed and thorough explanation of the issues faced in the rural-urban fringe. They discuss three issues and have related these issues well to place for illustration purposes.

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

Candidate still provides a good answer but the depth of knowledge may be less. They may only discuss one or two issues faced in the rural-urban fringe. Their reference to place for illustration may be poor or omitted completely.

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

A limited answer that lacks understanding of the issues expected. There may be inaccuracies and incorrect information.

7 There are three main elements to this question - the causes, problems and solutions of debt. Causes for the debt burden may include:

- Many LEDCs borrowed heavily from the 1960s onward in an attempt to develop industrialisation. At this stage the MEDCs and the World Bank were willing to lend at relatively low interest rates. The loans were used to finance capital-intensive projects such as power stations, often using western technology and expertise. In the 1970s, partly due to the downturn in the global economy, these interest rates were increased.
- The increase in the price of oil had a further serious impact on many LEDCs. Many LEDCs were heavily dependent on imported oil, and some were forced to borrow still more to maintain their levels of progress.
- Trade problems also affected the LEDCs. In the west the cost of manufactured products increased but the price of primary goods or commodities fell. As LEDCs exported mostly commodities and imported manufactured goods, their balance of trade deteriorated, pushing them further into debt.
- In some cases the loans were spent unwisely on large capital schemes and the LEDCs did not have an adequate trained workforce to make these schemes operational.

Solutions: In the late 1990s many LEDCs received some help with their mounting debt burden. These included additional loans at much lower rates of interest but most were tied to strict conditions such as SAPs. In 2000 the Millennium Development Goals were set up along with the Make Poverty History Campaign to highlight awareness of the problems in many LEDCs. The proposed measures that were set out to improve the situation in Africa included an extension of the debt relief scheme known as the Heavily Indebted Poor Country Initiative. The poorest 18 countries are to have their debts written off completely.

Candidates need to address each element but a balance is not needed. They do not need to introduce place for illustration so do not require this.

Level 3 ([9]-[12])
A good answer that clearly understands the causes and problems of debt and is able to offer a number of ideas as to the solutions to this problem. Quality of language is good.

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

Still a good answer but one of the elements to the question may be weaker or not attempted. The depth of knowledge will be less.

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

The understanding is poor and there may be inaccuracies. The quality of communication will be poor. A candidate who only discusses one element will be included here.


