



General Certificate of Education

Geography 6031

Specification A

GGA5 Challenge and Change in the Human Environment

Mark Scheme

2006 examination - January series

Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation meeting attended by all examiners and is the scheme which was used by them in this examination. The standardisation meeting ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for the standardisation meeting each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed at the meeting and legislated for. If, after this meeting, examiners encounter unusual answers which have not been discussed at the meeting they are required to refer these to the Principal Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of candidates' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

General Guidance for A Level Geography Assistant Examiners

Quality of Written Language

As required by QCA, the marking scheme for this unit includes an overall assessment of quality of written communication. There are no discrete marks for the assessment of written communications but where questions are “Levels” marked, written communication will be assessed as one of the criteria within each level.

- Level 1:** Language is basic, descriptions and explanations are over simplified and lack clarity.
- Level 2:** Generally accurate use of language; descriptions and explanations can be easily followed, but are not clearly expressed throughout.
- Level 3:** Accurate and appropriate use of language; descriptions and explanations are expressed with clarity throughout.

Levels marking – General Criteria

The following general criteria relate to knowledge, understanding and their critical application and the quality of written communication as outlined in the AQA Geography A subject specification. They are designed to assist examiners in determining into which band the quality of response should be placed, and should be used when assessing the level of response an answer has achieved. It is anticipated that candidates’ performances under the various dimensions will be broadly inter-related and the general guidelines for each level are as follows:

- Level 1:** An answer at this level is likely to:
- display a basic understanding of the topic;
 - make one of two points without support of appropriate exemplification or application of principle;
 - demonstrate a simplistic style of writing, perhaps lacking close relation to the term of the question and unlikely to communicate complexity of subject matter;
 - lack organisation, relevance and specialist vocabulary;
 - demonstrate deficiencies in legibility, spelling, grammar and punctuation, which detract from the clarity of meaning.
- Level 2:** An answer at this level is likely to:
- display a clear understanding of the topic;
 - make one or two points with support of appropriate exemplification and/or application of principle;
 - demonstrate a clear style of writing which clearly addresses the terms of the question
 - demonstrate a degree of organisation and use of specialist terms.
 - demonstrate sufficient legibility of and quality of spelling, grammar and punctuation to communicate meaning clearly.

Level 3: An answer at this level is likely to:

- display a detailed understanding of the topic;
- make several points with support of appropriate exemplification and/or application of principle;
- demonstrate a sophisticated style of writing incorporating measured and qualified explanation and comment as required by the question and reflecting awareness of the complexity of subject matter and/or incompleteness/tentativeness of explanation;
- demonstrate a clear sense of purpose so that the responses are seen to closely relate to the requirements of the question with confident use of specialist vocabulary;
- demonstrate legibility of text, and qualities of spelling, grammar and punctuation, which contribute to complete clarity of meaning.

N.B. A perfect answer is not usually required for full marks. Clearly it will be possible for an individual candidate to demonstrate variable performance between the levels. In such cases the principle of best-fit should be applied. Experience suggests that the use of exemplars within this mark scheme and the discussion which takes place during the Standardisation Meeting normally provides sufficient guidance on the use of levels in marking.

Annotation of Scripts

- Where an answer is marked using a levels of response scheme the examiner should annotate the script with a 'L1' 'L2' or 'L3' at the point where that level is thought to have been reached. The consequent mark should appear in the right-hand column. Where an answer fails to achieve Level 1, zero marks should be given.
- Where answers do not require levels of response marking, each script should be annotated to show that one tick equals one mark. It is helpful if the tick can be positioned in the part of the answer which is thought to be credit-worthy.

General

It is important to recognise that many of the answers shown within this marking scheme are only exemplars. Where possible, the range of accepted responses is indicated, but because many questions are open-ended in their nature, alternative answers may be equally credit-worthy. The degree of acceptability is clarified through the Standardisation Meeting and subsequently by telephone with the Team Leader as necessary.

Question 1

Population Pressure and Resource Management

- (a) There are a number of ways to answer this question. Clearly, the birth rate has fallen by 7/1000 over the period in question. This is supported by the falling fertility rate and declining NI (1-2 marks). Population continues to rise but at an increasingly marginal rate, evidenced by comparing 1997, 2004 and projected figures for 2025 (1-2 marks). Though dependency has not increased, the sharp decline in under 15's clearly has negative implications for the future workforce numbers (1-2 marks depending on detail). All this combined with life expectancy rising and GNP per capita falling, indicates that Singapore is in danger of becoming under populated with an ageing population (1-2 marks with explanation). Candidates must use Figure 1. Max. 2 if not.
Max 1 for lifting from table. **(4 marks)**
- (b) The creation and implementation of a pro-natalist population policy will be one method, with a view to increasing the birth rate towards optimum population and a fertility rate, replacement level of 2.1 (1-3 marks). Tax breaks on families who have more than two children, e.g. a fourth child born after 1st Jan 1988, generated a \$20,000 tax break for parents in Singapore (1-3 marks with exemplification). Preferential tax break for parents in Singapore (1-3 marks with exemplification). Preferential school admission and nursery places (1 mark). Advertising slogans - "Have three or more if you can afford it" clearly aimed at encouraging more affluent members of society to procreate (1-2 marks depending on detail). Discouraging abortion (1 mark). Any valid example is acceptable. Max 2 for linking with no policy outline.
(4 marks)
- (c) This question is *not* about describing the population policies of a particular country or area of the world.
The likely case studies are China, India, Nigeria and Egypt.

Justification

This largely depends on the selected country, but essentially the justification lies in terms of overpopulation and resource depletion. Anti-natal policies are necessary to control and limit growth, so that resource provision adequately matches the needs of the population. Some resources such as food, energy and water might well be referred to.

Evaluation

Candidates must analyse the impact which the policy has had since its introduction i.e. how successful the policy has been and what, if any, unintended effects the policy has had.

Level 1 Generic Descriptor (1-3)

A limited response, which drifts into description of policy with very little justification for it. There may be some limited evaluation of the impact through description of the chosen case study.

Level 2 Generic Descriptor (4-5)

There is still likely to be some description of policy, though more justification for it. Emphasis will be case study analysis as opposed to description. Evaluation now present and should act as a conclusion to the answer.

Level 3 Generic Descriptor (6-7)

Any description will clearly be linked to justification of policy followed by evaluation of it in a clearly structured response. Support through detailed case study will be accurate and valid. **(7 marks)**

Total for this question: 15 marks

Question 2**Managing cities challenges and issues**

- a) Everton is clearly more deprived (1 mark). Accurate and valid manipulation of figures to offer evidence (1 mark). Lower percentage of home ownership/higher percentage rented indicates higher levels of unemployment or the likelihood of lower paid jobs (1-2 marks) or vice-versa for the Church ward. Relatively high provision of council and housing association property in Everton reflects high demand for lower cost accommodation or vice-versa for Church (1 mark). Lower rates of car ownership in Everton reflects lower incomes and socio-economic groupings, particularly when used in conjunction with those who have two or more cars (1-2 mark). There is clearly a great disparity between both wards here (1 mark). The number of private rented is remarkably similar and challenges the notion that Everton is more deprived than Church (1 mark). The lower rate of homes without central heating in Everton is likely to reflect the high proportion of council and housing association properties that have a requirement to provide this facility (1 mark).

Be aware of straight reversals in this response – no credit.

Also allow comparison with Liverpool figures to illustrate deprivation.

(4 marks)

- b) The decline of traditional heavy industry leads to mass unemployment in many inner-city areas (1-3 marks with appropriate exemplification). Those with skills, education, affluence and / or mobility often left in search of better opportunity elsewhere (1-3 marks depending on detail). Relocation of business, light industry and services to the suburbs exacerbates the demise of the inner city (1 mark). Local authority revenue from the inner city collapses as unemployment increases (1 mark). Investment in the built / local environment and community facilities decreases (1-3 marks). Lack of skills and education for retraining exacerbating poverty (1-2 marks).

(4 marks)

- c) T
 The answer to this question really depends upon the focus of the candidate's response. As a generalisation, the inner city areas of Britain have gradually seen improvement, as wealthier members of society have been encouraged to re-urbanize. However, a fair criticism would be that the poorest sections of the inner city have remained poor. The point here is that the underlying cause of deprivation, unemployment, still remains high in many inner cities. Expect London Docklands and Greater Manchester to figure in many responses. Gentrification of clearly explained and elaborated can access Level 3.

So, although the Docklands has been transformed and building programmes established in most inner cities, there is still widespread deprivation. Be aware of drift into central areas which unless clearly linked to inner city is not relevant.

Level 1 Generic Descriptor (1-3)

Predominantly descriptive with weak support. Little or no evaluation and does not come to a view.

Level 2 Generic Descriptor (4-5)

Still a little descriptive, but attempts evaluative comment. Support used to inform the response and back up the argument. Tentative suggestions of a view.

Level 3 Generic Descriptor (6-7)

Clearly evaluates inner city regeneration strategies. Good support with detail and clearly used to inform the argument. Comes to a view.

(7 marks)

Total for this Question: 15 marks

Question 3

Recreation and tourism

- a) Attractions of the environment such as the primary resources of unspoilt landscape, climate and ecosystems, using evidence provided in the photograph (1-2 marks depending on detail). Improved access as tour operators create the necessary conditions for these opportunities to be exploited (1-2 marks). Increased affluence, leisure time, paid holidays and, therefore, novelty aspect/adventure holiday (max 2) opportunity for recreation in far away places (1-2 marks). A growing awareness of, and interest in, environmental issues by an educated public (1-2 marks with exemplification). **(4 marks)**
- b) Secondary resources have to be kept to minimum so as to keep the area natural and pristine (1 mark). With a lack of secondary resources such as accommodation and transport infrastructure, capacity is quickly reached (1-2 marks). Without careful management and regulation, particularly in terms of access and visitor numbers, environmental degradation can ensue when over-capacity is reached (Max. 2 marks with examples of degradation). Political issues - these areas are protected from development by a variety of international legislation and any development must not be in conflict with such treaties (1-2 marks depending on elaboration) **(4 marks)**.
- c) A useful introduction would be to briefly outline what sustainable tourism aims to achieve. In the rainforest, for example, sustainability involves environmental conservation; education; income generation for local people; construction of secondary resources in keeping with the surrounding landscape, and so on. 'Take only photographs and leave only footprints' could be a useful operating and marketing slogan. There may be some comment on where to advertise and market the destination.

Any eco-tourist destination can be considered as valid exemplification. The justification must clearly link the outline of the scheme to the aims of sustainable tourism.

Level 1 Generic Descriptor (1-3)

Limited reference to a selected natural environment related to eco-tourism. Support may be present but not used to good effect. May misunderstand sustainable tourism.

Level 2 Generic Descriptor (4-5)

Does explain how sustainability can be achieved in the chosen environment by describing a range of measures to minimise environmental impact. Also, expect comment on how local people can benefit. Little justification of policies though.

Level 3 Generic Descriptor (6-7)

A thorough and well-structured examination of promoting sustainable tourism in a chosen natural setting. Considers a range of measures to conserve environment, improve local incomes and educate tourists. Clear justification of policies. Exemplification is likely to be a feature.

(7 marks)

Total for this Question: 15 marks

Mark Scheme for Synoptic Essays

Preamble

Examiners should bear in mind that these questions are synoptic in nature and offer candidates the opportunity to demonstrate knowledge and understanding:

1. across a range of geographical subject matter;
2. of connections between the different aspects of geography in the specification;
3. of the importance, where relevant, of human perspectives on themes and issues.

Candidates are advised of this both in the Assessment Unit Rubric and in the Note to Candidate which precedes the essay questions in Section B. Synoptic elements might therefore feature in answers matching all the criteria bands but can be expected to feature more prominently in higher mark bands. It will be seen that explicit synoptic content is a necessary feature of the two band ranges 21-27 and 28-30.

Additionally essay writing is an important vehicle for the demonstration of communication skills – at Level 3 these refer to writing in a manner appropriate to purpose and complex subject matter; organising relevant information clearly and coherently using specialist vocabulary as appropriate and ensuring clarity of meaning through legible text, accurate spelling, punctuation and grammar. (Key Skills – Communication Level 3 C3.3 [QCA]; Para. 13 AS/A Level Geography Specification Outlines [QCA].

Synoptic content and communication aspects should be kept in mind when assessing the unit and are incorporated into the criteria bands set out below which refer to knowledge, understanding and skills. Indicate synoptic content using the letter ‘s’ in the margin as appropriate.

CRITERIA BANDS

Examiners will use the criteria below to evaluate the work, placing the candidate’s performance in the appropriate band and attributing the mark from the left-hand column appropriate to the question concerned. They should seek the best fit from the band descriptor – work adjudged to be in a particular band might not contain all the features attributed to that band.

28 – 30

A very good answer. Consistently relevant to the theme and to the demands of the question. Evaluates explicitly where required. Displays a very confident range of knowledge and understanding by using the appropriate terminology, critically referring to concepts and theory where necessary and establishing relationships between different physical and/or human factors and processes. Synoptic elements are a prominent feature and are fully integrated into the answer and used to purposeful effect in respect of the question’s requirements. Demonstrates, where relevant, either implicitly or explicitly awareness of human perspectives upon geographical themes and issues. Argues coherently and in an organized, logical and balanced fashion. Support is consistent, accurate and detailed. A well developed essay style. Detailed and sophisticated communication skills with fluent and cogent writing style.

21 – 27

A good answer, which remains relevant to the theme and demands of the question. Evaluation may now only be implicit. Displays a confident range of knowledge and understanding, but with a few omissions at the lower end, e.g. some terminology missing or some pertinent relationships left unexplored. Synoptic elements should be a feature of the answer and seen to be meeting the question's requirements. Some possibly rather uncritical reference to theory; some reference to awareness of human perspectives and decisions taking on geographical issues and problems. Argues well, but organisation may be suspect in places. Support is invariably there, but may not always be detailed. A competent essay style. Effective communication skills with accurate spelling, punctuation and grammar.

14 – 20

A satisfactory answer ranging down to the mediocre, which always attempts, but not always succeeds to be relevant. Lacking in evaluation. Displays a reasonable grasp of knowledge, but understanding is suspect in places. Relevant theory and concepts might be mentioned but with basic uncritical application. The interconnections and relationships between different physical and/or human processes are briefly mentioned but understanding of their significance is limited. There is some synoptic content which is relevant to the question. Argument and analysis are partial and become less significant in relation to mere description. Increasingly unbalanced as an answer, and the logic and organisation are clearly deficient. Support is not detailed here, occasionally inaccurate and barely consistent. The bare bones of an essay format. Appropriate communication skills so that meaning is almost invariably clear with adequate language skills. Possibly some spelling/punctuation/grammar errors.

7 – 13

A very mediocre answer, which is only occasionally relevant to both the theme and the demands of the question. Decidedly deficient in knowledge and understanding with only simplistic notion of relevant theory and concepts. Little if any relevance to inter-relationships between physical and/or human processes and factors or subject matter from other elements in the specification. Increasing irrelevance in a predominantly descriptive context. Clearly lacks an ability to organise material and may drift into another answer. Support is scanty and usually suspect. A weak, barely perceptible, essay format. Basic communication skills – many spelling errors and/or oddities of grammar and punctuation.

1 – 6

A very weak answer, which shows little attempt to follow the theme and the demands of the question. A very low level of knowledge and understanding, with even the simplest of concepts avoided. Very inaccurate and may completely miss the point. No idea of how to organise material with haphazard format, evidence of guesswork and little or no support. No attempt at an essay format. Little or no language and communication skills. Many errors in spelling, punctuation and grammar.

Question 4

Discuss the view that current levels of resource consumption are permanently damaging the environment and the quality of life itself.

The negative view

Quite clearly current resource usage is unsustainable. Taking oil for example, there are a variety of projections, but few believe that oil has more than eighty or so years left as a viable human resource. Considering that so many industries depend on oil or its derivatives, unless there is some drastic change or discovery, the consumption of this commodity will soon lead to a decline in living standards. Also, the consumption of oil and other fossil fuels has contributed to the proliferation of greenhouse gas. The rising sea levels and incidence of global climate change could be cited as evidence of permanent damage to the environment. (Potential synoptic links to 10.1, 10.2 and 10.3)

Continued population growth rates are further exacerbating the problems of resource consumption. Population is growing fastest in those countries where resources are most limited. Desertification is one realistic outcome in Sub-Saharan Africa, which results in this case from the over-use of soil, a vital resource in an arid landscape. The overuse of soil has come about as a result of a rapid increase in demand for food from countries in the LEDW. If soil's ability to produce food for people diminishes, then the quality of life of the people is sure to suffer. (Potential synoptic links to 10.3)

Wood is another resource, which many argue is being used to the point where the environment is being damaged and eventually quality of life is sure to suffer. Candidates can and will link deforestation to global warming and general environmental degradation. (potential synoptic links to 13.1 and 13.3)

This is clearly not an exhaustive list. It is intended to give the examiner a feel for the type of approach to be expected from many candidates. Expect some use of theory such as Malthus in support of this view. A response which stops here is clearly lacking in discussion and is certainly unbalanced.

The positive view

There is no doubt that some resources are depleting rapidly but, with technological advance and ingenuity, sustainable solutions are sure to be found.

Taking wood for example, sustainable forests now exist in many parts of Europe and the wider world, providing wood in an entirely sustainable fashion. (Potential synoptic links to 10.3.)

Food production has been radically enhanced by the Green Revolution, where output has multiplied to meet and exceed the needs of the population. It would also be legitimate to refer to GM crops as a method of increasing production, improving quality of life and reducing the environmental impact of farming. (Potential synoptic links to 11.3.)

Energy production is a real challenge. Alternative energy technology could be alluded to as one method of using technology to reduce environmental impact while still meeting the energy needs of people. Candidates should really acknowledge the challenges and difficulties in harnessing from natural systems.

Aid from the MEDW has been used successfully to initiate more sustainable usage of resources, particularly in farming practices and water provision in the LEDW.

Expect the use of some theory to support this response, particularly Boserup.

A good answer should counter-balance both arguments and preferably come to a view. Detailed support/exemplification has to be a feature also.

Total for this Question: 30 marks

Question 5

Although environmental problems in cities are remarkably similar, the responses differ. To what extent do you agree with this view?

Most candidates should realise that the response requires an LEDW/MEDW contrast.

Be aware that limited responses will simply describe a range of environmental problems in both worlds from learned case studies, without acknowledging the similarity (or otherwise) of the problems. Equally, the same weaker responses will lack evaluation of responses to tackle the problems.

There should be two parts to the response.

Essentially the first part of the question is asking whether there are similarities in the environmental problems facing cities in both worlds. There are ample opportunities to support the response here with case studies from both the MEDW and LEDW.

Candidates should acknowledge that environmental problems may have some similarities though the magnitude of such problems is much greater in the LEDW.

Candidates are likely to break environmental problems down into:

- Air pollution
 - Water pollution
 - Land pollution and waste management
 - The spread of the city into rural landscapes
- (Potential synoptic links here to 10.1, 10.2, 11.2, 13.1 and 13.2.)

The LEDW faces greater challenges since government controls are often absent, the capital to tackle the problems does not exist and the populations continue to grow. For the LEDW expect the following case studies:

- Air pollution in Mexico
 - Water pollution in the Ganges, Bangladesh
 - Approaches to waste in cities such as Bombay
- (Potential synoptic links to 10.1 and 10.2.)

The MEDW also faces similar challenges.

The main contrast between LEDW and MEDW though is scale. Taking London, Mexico and air pollution for example. Though smog episodes occur in both cities, the magnitude, frequency and impact is clearly much greater in Mexico. A valid explanation for this is clearly creditable. Also though (because of industry, climate and topography), cities such as Athens and Los Angeles have serious and severe incidence of air pollution despite being in the MEDW. This could invite comparison with cities in the LEDW.

An important contrast is that the impact of these environmental problems upon population is generally much more severe in the LEDW. Taking the River Ganges, for example, the fact that people use the polluted river for washing, irrigation and drinking water means that incidences of poisoning and rates of disease caused by pollution are markedly higher.

Be aware of drift into historical description of pollution of air and water in the heyday of British industrialisation. The question does not invite a historical context.

For many candidates, the second part of the question about responding to these concerns is likely to have a two-world contrast, though the question does not specifically ask for that.

The important point for marking purposes is that some evaluation should take place when assessing whether responses do indeed differ. Weaker responses are less likely to evaluate, or perhaps only evaluate fleetingly.

The following are some examples of the ways in which responses differ.

For air pollution, Mexico City introduced a colour coding permit scheme, to limit the number of cars in the city. This reduced the number of vehicles and dramatically improved the quality of the air. (Look for figures to support this evaluation.) Also some may refer to the Congestion Charge in London and the impact it has had on reducing the number of vehicles in and around the central area, as well as reducing nitrogen dioxide levels.

Waste management schemes could be evaluated in terms of sustainability and impact upon the natural environment. Evaluation of incineration as a method of waste disposal is certainly worthy of credit. This could be legitimately contrasted with waste management in the LEDW.

Since the spread of towns and cities into rural areas is clearly an environmental problem, measures to tackle that could legitimately be evaluated. Candidates could therefore evaluate Green Belts as a measure of controlling development. It is important though that candidates do not drift into the wider Green Belt debate, specifically related to housing shortage in the south east of England.

The summary should acknowledge that problems in both worlds are often similar though generally greater in magnitude in the LEDW. Managing the environment in cities in the MEDW is a challenge but with finance, legislation and technology, governments are making progress. In the LEDW, there is so much to be done before any real progress can be made. Though there are some positive initiatives, until population growth rates stabilise and in-migration rates decline, cities are going to continue to grow and problems continue to escalate.

Total for this Question: 30 marks

Question 6

Tourism only really benefits the MEDW. How far do you agree with this statement?

A negative view in support of the statement

It is certainly true that tourism is more beneficial to the MEDW. For tourism in the LEDW, the tourist is most often from the MEDW and gains an experience. The revenue from tourism most often only benefits multinational companies. The resort complexes are often beyond the reach of the local people in the LEDW. The local people can become dependent on tourism as it provides a basic income. At the same time local traditions and practices are lost. Farming is a good example, where communities can be disrupted. (Potential synoptic links to 10.3, 11.3.)

Leakage is most often massive. The flight, hotel company and inclusive deals provided by travel agents means that local business sees little, if any of the revenues. Also, the top management jobs at the resorts are nearly always given over to foreign employees. Local people often feel ostracized in their own communities, with valid arguments of prejudice. (Potential links to 10.3.)

Environmental conservation in the LEDW for tourism, often means that local people are forced off the land, which they may have traditionally lived on for many thousands of years. (Potential links with 13.1.)

The LEDW is at the mercy of changing tastes and attitudes. Also, any political instability in the host country could mean disaster for a fledgling industry, casting thousands of dependent employees adrift into an unknown economic future, with increased poverty the only certainty.

There are numerous examples which could be used as valid exemplification. Kenya is likely to figure highly in many candidates' responses.

A positive view challenging the statement

Tourism offers many LEDCs the only realistic opportunity for economic development. Many of these countries simply have no other preconditions for growth. Without capitalising on the natural advantages of climate, ecosystems and heritage, these regions are set to remain economically stagnant, often reliant on only one or two exports relating to farming or mining. (Links to 11.3.)

Tourism could provide the market and stimulus for a variety of entrepreneurial activity, creating opportunities for local people to cash in on niche markets.

Many LEDCs have successfully set up their own airlines and hotel chains, to more equitably cash- in on the potential economic gains from tourism.

Sustainability, environmental protection and conservation are some of the most positive outcomes of the growth of tourism in the LEDW. Environments have to be maintained in their natural state or the tourists will simply stop coming. This link conserves environments and protects habitats long into the future. (Links to 10.3.). However poorly paid the employees in the industry are, it has to be more substantial income than what they were doing previously, or they would surely return to that work.

Peripheral development is one of the most positive aspects of tourism in the LEDW. Roads, schools, hospitals and services improve for everybody and not just the tourists.

These are the themes along which most candidates should argue. A good conclusion will counterbalance both sides of the argument and must come to a view. Detailed support will be crucial to exemplifying a good response.

Total for this Question: 30 marks