



ASSESSMENT and
QUALIFICATIONS
ALLIANCE

General Certificate of Education

Geography 5031 Full Course
Specification A

Unit 3 GGA3

Mark Scheme

2007 examination - June series

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GGA3

General Guidance for A Level Geography Assistant Examiners

Quality of Written Communication

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 style of writing which matches the requirements of the question and acknowledges the potential complexity of the subject matter;
- demonstrate relevance and coherence with appropriate use of specialist vocabulary;
- demonstrate legibility of text, and qualities of spelling, grammar and punctuation which do not detract from the clarity of meaning.

- 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 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.

NB 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 '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 Advice

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.

GGA3

Question 1

- (a) (i) 2 x 2 marks for accurately plotting coordinates to complete track.
1 mark for plot within the square shown on figure 1. **4 marks**
- (ii) 0900 hours/9.00 am on 28th August (2) 1500 hours/3.00 pm or 2100 hours/9.00 pm 28th August (1)
Justification likely to relate to position of storm – west of Florida (1); south east of peninsula in S. Louisiana (1).
Any valid points relating to comparable locations on satellite image and tracking map.
1 mark minimum for each component. **3 marks**
- (iii) Any valid label which clearly relates to the hurricane and is visible on the satellite image.
Features must be arrowed to be worthy of credit.
Labels likely to relate to clear eye (1) whiter cloud marking the eyewall to west (1); anticlockwise movement (1); swirls of cloud being attracted to hurricane (1) more broken cloud to north (1) circular shape (1) reference to size (1) clear skies in front of storm (1). Detail on label can attract a mark for elaboration e.g. regarding wider extension to south east. (1) **6 marks**
- (b) Frequency (fr) – overall there is little difference between the decades. However, the current decade is only 1/3 complete yet has one/two less in number of hurricanes of category 3 or greater which have made landfall.
Another significant difference is that those in the present decade all made landfall in one year whereas often previously, they had been more spread out. At times, there were clusters - e.g. in the early 1980s but 2004 was unique for the decade.
Often, there was a wide distribution throughout the decade – with the 1990s being in clear contrast to the present decade.
Paths (p) -1970s was the only decade when all hurricanes of category 3 or above making landfall originated in the Gulf; those originating in the Atlantic just formed the majority – 3:2 in 1980s and 1990s whilst the Gulf is just in majority 2:1 in present decade.
The southern states were most affected in 1970s and 1980s; – whilst Florida ‘escaped’ – yet 2 of the 3 hurricanes in the present decade have hit Florida and 1 in 1992 (Andrew).
The eastern seaboard states were not affected in 1980s and to a lesser extent in 1990’s and escaped the 1970s and so far during current decade.
Some of the longest tracks have been more recent hurricanes – notably Andrew, Fran and Ivan. This does not seem to link to their origin.

Level marking

Level 1 (Basic)

(1-5 marks)

Describes maps – frequency and or paths – individually.
Evidence may be generalised or there may be detail but there will be separate consideration of the figures.

Level 2 (Clear)

(6-8 marks)

Begins to use information with regard to comparing or contrasting – so at least 2 of the figures are considered simultaneously. Will offer some specific evidence in support. May focus on one element – frequency or paths more – there will be greater balance at the top end.

Level 3 (Detailed)

(9-10 marks)

Clear, purposeful use of information.
Both contrasts (likely to be dominant) and comparisons apparent. Frequency and paths both considered with relative balance.
Evidence present throughout supporting clear analysis.

Total 10 marks

- | | | | |
|-----|------|--|----------------|
| (c) | (i) | 2 marks for seeking to draw an appropriate best fit line
1 x 1 mark for identifying a valid anomaly. | 3 marks |
| | (ii) | <p>(✓a) Hurricane Andrew is the second most intense and most expensive (1).
However, the most intense – Camille – is similar to those within 940-972 range (1).
There are many within above range which have damage costs between 1 and 4 million (and e.g.) (1) whilst there are others having significantly higher amounts of damage – notably Frances with 960mb lowest pressure and 9 million dollars damage in contrast to Elena and Bob – similar pressure but under 2 million dollars of damage (1).</p> <p>(✓f) Conversely, it could be argued that there is support for the hypothesis.
There is a general trend (with the exception of Camille and Hugo) that the most intense storms cause more damage – Charley and Ivan provide some evidence of this (1) - but support is limited.
Agnes – the weakest causes significant damage – more than Camille, the strongest in terms of costs (1).</p> <p>(✓c) There is a wide variety of evidence which can be presented.
Allow 4 x 1 for evidence presented in an analytical way in the context of the question. If information is merely descriptive (must be reference to both variables simultaneously) allow 2 x 1. 2 marks are available for evaluation. The limited extent of the applicability of the hypothesis should be noted (1 mark) with qualification for the second mark.</p> | 6 marks |

(d) Impacts (i) relate to effects of wind and rain – houses flooded as people sought refuge in upper storeys and extensive flooding showing map – most of area between lake and river under water as levees along Mississippi were breached. Wind too had an effect - causing structural damage e.g. to Superdome where many had sheltered and also on oil rigs in Gulf of Mexico.

Comment (c) likely to relate to relative importance of floodwaters rather than wind... and note that this was as bad as it was due to the levees failing.

Knock on impacts of this was many people with no shelter, no clean water – so a public health emergency was declared, no food or other supplies and so crime – looting but also violent crime. People were dying in hospitals due to lack of power and supplies. The price of oil increased due to expected shortages in the aftermath of the hurricane.

Comment likely to relate to scale and nature of problem – such impacts are not expected in MEDW where much preparation apparent.

Responses (r) initially consisted of preparation – New Orleans was meant to have been cleared – yet thousands of people clearly remained. For those who left, there were obvious problems with leaving the city on the congested roads. Katrina had clearly been tracked and there was adequate time to prepare.

Official responses piecemeal – seeking to repair the levees and only 4 days later was there an aid package beginning to gain some coherence.

Comment likely to question why so many people remained in the city despite evacuation, why road network clearly so unable to cope; why effect so poorly co-ordinated – basic supplies not present ; moving people from Superdome in aftermath, people dying, this lack of co-ordination expected in LEDW but not in USA. Lack of understanding of scale of problem and need for plan to be in place prior to the event.

Level marking

Level 1 (Basic)

(1-5 marks)

Describe impacts and/or responses.
Heavy reliance on Figure 6 – items ‘lifted’ in a random way.
Generalised evidence – or detail which is included from Figure 6.

Level 2 (Clear)

(6-8 marks)

Begins to target information to question.
Clearly identifies main impacts or responses – with mention of both at the top of band.
Some evidence used in support.
Begins to comment on issues which begin to emerge – may comment only on impacts or responses.

Level 3 (Detailed)

(9-10 marks)

Clearly targets information to question.
Issues are clearly derived from impacts and responses which are effectively summarised.
Clear, pertinent comment regarding issues relating to both impact and responses.

Total 10 marks

- (e) (i) Allow up to 2 marks for either component; minimum 1 for each.
Aim – e.g. to determine whether CBD can be split internally (1)
Using criteria such as land use , pedestrian counts (1)
Study area – Local town centre - as this was easily accessible and public transport / major roads (access needs qualifying) (1), and as it was nearby allowed the opportunity to revisit.
May refer to suitability in terms of size and theory or possibly safety – pedestrianised area, well lit etc **3 marks**
- (ii) Pedestrian counts – for 5 minutes (1) every 100 strides (1) or alternate sides of the road (1). Everybody who came past in either direction was counted as long as they were walking (1). (1) for a list of equipment.
The count will show the intensity of use (1) and variation in different parts of the CBD (1) which can then be subdivided on this criterion (1) allow maximum 3, minimum 2 on each component. **5 marks**

Question 2

- (a) (i) 3 x 1 for correctly shading each area according to the key. **3 marks**
- (ii) Description (✓d) likely to state that areas of highest increase are largely in south and east (1), especially in south west and east England together with East Midlands. (1) Elsewhere, areas of highest increase are more piecemeal e.g. parts of Yorkshire and the Humber (1). Areas of general increase (7.2 or more) certainly more continuous in southern half of the country (1). Areas of lower increase occur in North East, much of coastal area of Wales (1). South East, especially around London can be seen as an exception due to lower rates of growth than generally true in the south (1). However, London does not experience decline (1) unlike many other major urban areas e.g. in south Wales (1) and northern conurbations e.g. Manchester, S. Yorkshire (1).
Expect a regional or population change category approach – but emphasis is on describing pattern not a piecemeal consideration of many different elements.
- Reasons (✓e) likely to relate to migration process – with areas of increase having supply of people moving in – (1) e.g. area north of London due to new housing developments/proximity to capital – i.e. pull factors (up to 3) and areas experiencing decline due to net migration loss due e.g. to high living costs, problems of city life – i.e. push factors (up to 3). Retirement migration may be suggested e.g. for coastal areas in south west. Natural change may also be considered – young professionals in urban areas having children later.
Emphasis is on explanation of pattern, not individual occurrences.
Allow 1 per basic point; 1 + 1 per developed point.
Maximum 6, minimum 2 on either component. **8 marks**
- (b) (i) 3 if all 4 correct; 2 if 3 correct; 1 if 2 correct. **3 marks**
- (ii) Natural change (✓n) – overall reduction in importance of this component (1) but it has shown some variation – increasing 96-97 (1) and indeed since 2001 (1).
Net migration (✓m) has shown an overall increase in importance (1) and at times it has increased dramatically in a short space of time. E.g. 1997-8, 1998-9 (1) and at other times more slowly e.g. 1998-9 to 2002-3 (1).
Viewed together (✓t) - it is clear that net migration has become the more important component (1) since 1998-9 (1) and difference has been consistently maintained since then (1).
At the start of graph this component shared net loss and natural increase was clearly dominant.
Must be some reference to each of the above components – minimum of 1 for each. If decade by decade maximum (2). **6 marks**

- (c) Map showing origin (Figure 9a) shows dominance of a small number of countries in the highest two categories – notably clusters in East Asia, focussing on China (Burma and Vietnam); western Asia, especially Afghanistan but also Iran, Iraq, Turkey and smaller area in eastern Europe of former Yugoslavia. In Africa, Sudan stands out and countries to south west (Zaire and Angola). There are smaller pockets on west African coast (W. Sahara, Sierra Leone, Liberia). In middle categories, there appears much of Indonesia, S. Asia including India and Pakistan, many eastern European countries. Lowest categories appear in much of western Europe, USA/Canada, much of S. America and in large parts of Africa.
- Map showing country of asylum shows countries with highest numbers are Pakistan and Iran (i.e. countries bordering Afghanistan and two isolated locations - Tanzania and Germany. Areas with high numbers of asylum seekers do not generally have large numbers originating from there – although Iraq could be viewed as an exception. Other areas high on recipients (100000 – 500000) include North America much of N. Western Europe – notably UK, France – relatively wealthy countries – low on origins. Similarly, many central African countries have high numbers as do India and China. This may suggest that people are going to relatively near destinations – even neighbouring countries. South America remains of little importance whilst Australia and New Zealand like Europe and North America provide a destination, although to a lesser extent.
- Wide variety of responses likely – emphasis is on pattern, exceptions to pattern, not individual instances. Comment should refer to overall location/nature of areas of origin/destination; level of development; distance moved; in some cases countries are relatively high on both.

Level marking

Level 1 (Basic)

(1-4 marks)

Describe Figure 9a (origin) and/or 9b (destination area). Evidence may be generalised or there may be detail but maps will be referred to separately.

Level 2 (Clear)

(5-7 marks)

Begins to use information with regard to contrasting information question, so will consider figures at least in part simultaneously. This will increase towards the top of the band. There will be some evidence in support. Tentative /implicit comment.

Level 3 (Detailed)

(8-9 marks)

Clear, purposeful use of information. Figures considered together and contrasts clearly noted. Specific reference to evidence. Clear, explicit comment.

Total 9 marks

- (d) Proportional circles make it clear via size/key/scale to identify relative numbers concerned (1). Their location makes it equally clear to relate to a specific country (1). Separation of each symbol makes it easy to relate each one to a specific country (1). The use of circles allows a wide range of figures to be displayed (1).
 However, use of categories means actual numbers are not identified (1) the organisation of the continents makes it difficult to perceive a clear pattern (1). Some larger countries cover more than one country.
 3 x 1 – maximum 2, minimum 1 on either component.

3 marks

- (e) Economic issues (e) – exploitation of cockle beds – not before used - by gangmasters leading illegal Chinese immigrants - what of locals and local economy.
 Immigrants who end up unemployed and add to tax burden.
 In conflict to above, need for workers with certain skills where there is a shortage here and the need to consider ageing population.
 Social issues (s)
 The potential increased ability to provide adequate standard of public services.
 Different groups/cultures in society (Romanian, Chinese) ensure immigration is legal and people remain only whilst they are supposed to.
 Moral issues (m) - Exploitation of Chinese immigrants – both in cockle picking and trading in people – to transport them from poor Chinese provinces.

Level marking

Level 1 (Basic)

(1-5 marks)

Describes information contained in extracts.
 No clear attempt to classify.
 Heavy reliance on Figure 11.

Level 2 (Clear)

(6-8 marks)

Begins to target information to question.
 Some evidence used in support.
 Different types begin to emerge – probably economic and should be two mentioned at least for top of level.
 Begins to discuss/debate with tentative comment.

Level 3 (Detailed)

(9-10 marks)

Clearly targets information to question.
 Extracts are used to support points made.
 Issues are noted and debated/discussed and at least 2 well done – but all 3 mentioned.
 Clear, explicit, pertinent comment regarding issues.

Total 10 marks

- (f) (i) Aim – to determine whether characteristics of river A change downstream (1).
E.g. to find out whether width, depth and velocity increase (1).
Study area – suitable due to close proximity/easy access via specific roads/public transport (1); allowed opportunity to revisit. Water only 5 metres deep (1) so a safe location for hazardous fieldwork (1). Any valid point.
Up to 2 marks on either component; minimum 1 on each. **3 marks**
- (ii) Data item – e.g. velocity
Two ranging poles placed on bank 5/10 metres apart (1) a float/piece of orange peel (1) was placed in the water just before the first ranging pole (1) and when it passed it, a stop watch was started (1). This was stopped when orange peel reached the second pole (1). Repeated at sites downstream (1). (1) for a list of equipment.
Item was useful as the time orange peel took (1) gave an indication of speed which was central to aim. Recording at intervals means change downstream can be assessed (1).
Allow maximum (4), minimum (1) on each component. **5 marks**