



**General Certificate of Education**

**Geography GGA3**

*Specification A*

**Mark Scheme**

*2008 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.

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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

- 1 (a) (i)  $4 \times 1$  for correctly displaying temperature and rainfall data via line and bar graph.  
Idea of fluctuation for either temperature or rainfall (1) (4 marks)

- 1 (a) (ii) Description (d) likely to refer to rainfall occurring during evening and overnight on 29/30 October (1); two peaks can be identified at midnight and 0800 (1). There is fluctuation between the peaks (1). Evidence in support will attract further marks.

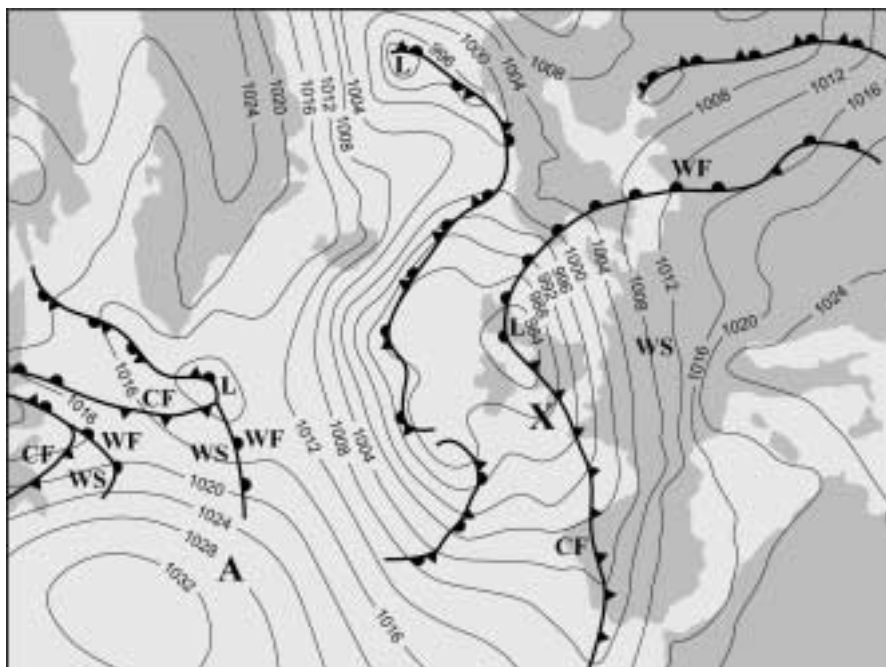
The temperature initially increases during the evening of 29 until 2200 (1); there is some variation within this increase with evidence (1). After 0100 on 30, temperatures fall gradually first and then more quickly (1) especially between 0600 and 0700 (1). Following some fluctuation, temperatures then begin to rise (1100 onwards) (1).

Comment (c) could refer to relationship between temperature e.g. greatest drop in temperatures occur prior to two rainfall peaks; there is a continued reduction after the second peak, but temperatures recover after the first rainfall peak; may note that temperatures are relatively high overnight; possible reasons for changes regarding the passage of the warm front and subsequently the warm sector and cold front – linked to the description.

$6 \times 1$ ; maximum 4; minimum 2 on each component.

(6 marks)

- 1 (b) (i)  $4 \times 1$  for appropriate positioning of labels. (4 marks)



- 1 (b) (ii) ✓ d Current weather conditions – complete cloud cover, large cumulonimbus clouds (or alternative appropriate description); rain, heavy; short periods / burst of rain with hail, thunder; temperatures likely to show a drop from earlier on – become cooler; winds likely to be relatively strong, south westerlies.

✓ e Reasons should relate to the passing of the cold front and processes occurring here i.e. the undercutting of the warm air by the cold forcing the former to rise relatively rapidly, cool and result in precipitation. Less accurate and more general statements will relate to the passage of a depression. *(Need to consider quality of responses on this and what is permissible in description).*

Developed points are possible, maximum of 2 on any weather aspect. Maximum 4, minimum 2 on either component.

**(6 marks)**

- 1 (c) Data for Heathrow seems to suggest increasing temperatures over the 9 year period with 5 out of 6 months showing a higher average, ranging from 0.2 in November to 3.0 in March. Rainfall exhibits a similar change, but there is no consistent trend here – e.g. there is a 26mm increase in September, but a 62mm decrease in November.
- Britain gets a monsoon forecast** – this article focuses on changing character of rainfall and its increasing intensity with more frequent downpours and the fact that this appears to fit with predictions for impact of global warming – but significantly earlier than initially believed.

**So was it a washout or the best summer of our lives?** – the focus here is on short term relatively extreme variation and the recent breaking of records and the impact of this over the last thirty years in suggesting global warming.

Assessment should consider apparent increase in evidence that attributes changes in weather to global warming – of which there is much from scientific sources presented. This may be tempered by the time scale of the Heathrow data and lack of data for intervening years. There is the possibility to comment on the change in 2006 between July and August not necessarily being representative – could have been a fluke.

### **Level 1**

**(1-4 marks)**

*Describes information in Figure 3.*

*May be detailed or generalised.*

*Will focus on certain sections of resource.*

*Varied points will allow access to the top of their level.*

### **Level 2**

**(5-7 marks)**

*Begins to use information to answer question.*

*Seeks to identify the key points and to use text and figures.*

*Will begin to discuss.*

*Some reference to evidence.*

*Tentative assessment of which may be implicit.*

### **Level 3**

**(8 Marks)**

*Clear, purposeful use of information.*

*Summarises the key points – is likely to be discursive.*

*Will refer to both figures and text.*

*Will refer to evidence in support.*

*Clear, explicit assessment that reflects the key points.*

#### **1 (d) (i) Figure 4a – past changes. (Description – d)**

There has been a clear increase in temperatures from 1860 to 2000 (1).

This has fluctuated (1) but has been positive since mid 1920s (1).

Since the end of the 1970s the trend has been constantly upwards (1) showing an increase of more than 0.5°C.

#### **Figure 4b – Predicted changes.**

This shows the greatest increases in temperature (5° or more) are expected continuously in Arctic region (1) and the continental interiors of Africa, South America, North America and parts of Asia (1).

The vast majority of the remaining land masses are predicted to have an increase of between 3° and 5° (1). This is in contrast to the oceans where in the Northern Hemisphere an increase of 2° - 3° is forecast (1) with generally 1° - 2° in the Southern Hemisphere.

Comment (c) should relate to the clarity of the trend in Figure 4a and perhaps equate it with industrialisation, burning of fossil fuels. In Figure 4b, the extent of warming of some of the coldest areas may be noted or indeed some of the poorest e.g. North Africa or most populous e.g. India, consequence of increased temperatures.

6 × 1.

Maximum 4, minimum 2 on either component.

**(6 marks)**

- 1 (d) (ii) Groups mentioned – environmentalists, politicians, scientists, Women’s Institute, Tesco, travellers.  
**Environmentalists** – largely seeking to bring climate change to the fore; to ensure the profile ranging from Friends of the Earth to Oxfam and RSPB.  
**Politicians** – green policies and taxes on both sides of the Atlantic are described.  
**Scientists** – suggesting the urgency of the need to act before it is too late.  
**W.I.** – putting pressure on supermarkets to reduce use of plastic bags and packaging in general.  
**Tesco** – willing to react to external pressure and reduce both packaging and bags and issue ‘green’ points on its loyalty card.  
**Travellers** are becoming more conscious of their impact and some are buying carbon credits to offset impact of travel.  
The extent to which these groups ‘think globally and act locally’ should result in clear assessment – there should be a recognition of variation between them and perhaps motives other than those of environmental for some.

**Level 1**

**(1-4 marks)**

*Describe information in Figure 5.*

*Heavy reliance on Figure 5.*

*May have detail on one aspect or a variety of points.*

*Not targeted to ‘thinking globally, acting locally’ focus.*

**Level 2**

**(5-7 marks)**

*Begins to use the information available.*

*Seeks to identify some of the groups involved and their role.*

*There is intermittent reference to evidence in support.*

*Tentative evaluation, which may be implicit.*

**Level 3**

**(8 marks)**

*Clear, purposeful use of the information available.*

*Identifies a range of groups – clear awareness.*

*There is reference to evidence in support.*

*Clear, explicit evaluation of to what extent.*

- 1 (e) (i) **Aim** (a)  
e.g. to evaluate the success of a regeneration scheme (1); to find out if local population perceive the success of the environment (1).  
**Area studied and its suitability** (s)  
e.g. near to place of residence / education so can revisit easily (1); relatively low cost in terms of time and distance (1) + 1 for elaboration; access (qualified) (1) appropriate example of regeneration scheme – with reason (1) + 1 for elaboration.  
3 × 1; up to 2 on either component; minimum 1.

**(3 marks)**



- 1 (e) (ii) e.g. questionnaire as data item.  
 ✓✓ **Risk assessment** – Traffic hazards – accidents in built up area (1).  
 Safety issues in urban environment – approaching people not known to them/being approached (1).  
 Must make risk clear and be specific to data item being collected.  
**Method** – questions seek to consider such aspects as level of satisfaction with services, environment (up to 2 for question topics); every tenth person asked (1) – up to 2 for sampling; may consider contingency plans if refusal; where questions asked – up to 2 and similarly when.  
 5 × 1. Allow up to 4 on either component, minimum 1 on each component.

(5 marks)

**TOTAL 50 marks**

**Question 2**

- 2 (a) (i) 4×1 for correctly displaying data via located bars. Maximum 3 if not shaded according to key. (4 marks)
- 2 (a) (ii) **Description** (d) likely to refer to highest percentage changes being in two adjacent southern counties (1); south is dominant in pattern with cluster of six counties, although percentages show clear variation (1) + (1) for evidence; elsewhere there are areas in central England and two isolated occurrences in north west and north east England (1). The actual number of employees is generally highest in the south (1), with Lancashire being an exception (1); whilst Cleveland as an isolated county has the lowest number of employees (1).  
**Comment** (c) should refer to relative importance of different areas of England; possible reasons for contrasts; contrasts between two sets of data, reasons for location of hi tech industry (2 max).  
 Statement regarding individual counties must be in the context of a pattern to be creditworthy.  
 6 × 1; maximum 4; minimum 2 on each component. (6 marks)
- 2 (b) (i) Labels for buildings (b) likely to relate to shape, number of storeys, design features, building materials, modern.  
 Labels for environment (e) likely to relate to landscaping, water feature, car parks, room for expansion.  
 Labels for layout (l) should relate to relative locations within the science park e.g. reference to the car parks being adjacent to each building; the central nature of the location of the water feature for one half of the park; the main service roads with access off and the use of roundabouts to facilitate this.  
 Any valid point – labels must be arrowed to area within white line.  
 It is possible that one label could contain more than one component.  
 Minimum of 2 on each component; maximum 4.  
 8 × 1 or 4 × (1 + 1); any combination. (8 marks)
- 2 (b) (ii) Figure 7 shows position of Oxford Science Park with regard to dual carriageway apparently free of traffic, allowing good access; suggests a peripheral environment due to fields indicating pleasant area and also nature of houses with possible opportunities for housing for key workers locally. The environment within the science park looks attractive which should have a positive impact on workers.  
 Figure 9 reinforces this – the building is attractive and the use of glass will make it light and airy with views of the lake area and plant life there. Building itself is prestigious – seems to suggest success just by company being present there.  
 Figure 10 – access is clearly a key consideration – the science park is located on the dual carriageway of the A4074, and only 2km from its junction with a ring road (A142/A423) and relatively near – a further 3km to the A34 – all these are principal routes. There is good access to CBD (5106) for business and recreation purposes e.g. museums present.  
 Edge of town location gives access to possible housing on the outskirts such as Littlemore and Little London. Relatively open environment – on eastern side of river. There are many colleges present e.g. 5206 – so potentially providing a source of highly skilled/professional workers related to development of software.

**Level 1****(1-5 marks)***Describes features found on the photographs and/or the map.**May be detailed or generalised.**Varied points will allow access to the top of the level.***Level 2****(6-8 marks)***Begins to use information to answer question – noting the significance of certain features.**Will refer to at least one photo and map.**Some reference to evidence.**Seeks to convince partner of the ideal location.***Level 3****(9-10 marks)***Clear, purposeful use of information.**Aware of the significance of the different features.**Will refer to both photos and the map.**Will refer to evidence in support.**Will really try to 'sell' location to partner as being ideal.***2 (c)**

Allow 1 mark for definition of globalisation.

Figure 11a shows a variety of Eastern European countries and two North African countries involved in the production of clothes for export to France (1). In Morocco, over a third of clothes made are for the French market (1). There is clearly evidence of globalisation with production being important for Eastern Europe and North Africa (1).

Figure 11b illustrates the concept to a greater extent (1) with longer distances being involved e.g. from Japan (1) and 3 continents providing the necessary materials in making the jeans (1).

 $6 \times 1$ .

Up to 4 for using evidence to illustrate the concept, with the remaining 2 marks for the assessment of 'to what extent' (a).

**(6 marks)****2 (d)**

Issues identified relate to relative proportion of selling price that goes to worker versus retailer (No Sweat); the subsidies given by governments of rich countries to their own farmers at the expense of farmers in poorer countries (the case of Mali and USA); the need for Sri Lanka to compete without help; relatively low wages paid and variation (Sri Lanka, Bangladesh etc.) and the working conditions endured by the employees (Sri Lanka).

**Level 1****(1-4 marks)***Describes information in Figure 12.**Heavy reliance on Figure 12.**May have detail on one aspect or a variety of points.***Level 2****(5-7 marks)***Begins to use the information available.**At least one issue is considered; two at the top end.**Key points are identified, clearly at the top end.**There is intermittent reference to evidence in support.**Tentative comment, which may be implicit.*

**Level 3****(8 marks)***Clear, purposeful use of the information available.**At least two issues are addressed – clear awareness.**Key points are summarised, pertinent points are noted.**There is reference to evidence in support.**Clear, explicit comment.*

- 2 (e) (i) Aim (a).  
 e.g. To determine if a river changes downstream (1); to find out if velocity increases with distance from the source (1).  
 Area studied and its suitability (s).  
 e.g. Near to place of residence/education (1); so can revisit easily (1); relatively low cost in terms of time and distance (1) + 1 for elaboration; access via footpaths to appropriate study sites (1) + 1 for elaboration.  
 3 × 1; up to 2 on either component; minimum 1.

**(3 marks)**

- 2 (e) (ii) e.g. velocity as data item.  
 Risk Assessment – Slipping on rocks on river bed and sustaining injury (1).  
 Deep, fast flowing water that could be difficult to stand up in (1).  
 Possible drowning hazard (1).  
 R - Must make risk clear and be specific to data item being collected.  
 Method – measure at left bank, middle and right bank (1), place two ranging poles (1) 10 metres apart (1), release float just upstream of first ranging pole (1), start stopwatch as it passes the pole (1), time it until it is in line with second ranging pole (1) stop the stopwatch when this occurs (1).  
 5 × 1, allow up to 4 on either component, minimum 1 on each component.

**(5 marks)**