



## General Certificate of Education

# Geography 5031

## *Specification A*

### *GGA3 Geographical Skills*

# 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 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 or 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.

**SECTION A****Question 1**

(a) (i)  $3 \times 1$  for correctly plotting each bar. **3 marks**

(ii) Description ✓d

Figures clearly fluctuate above and below mean (1) often lower than average runoff occurs in a number of years together (1) with evidence +1; similarly for higher than average runoff (1) with evidence +1.

Years of lower than average tend to be followed by years of higher than average runoff (1) +1 for evidence.

Recently, positive figures have been higher over a greater number of years – 1997 onwards (1).

Comment ✓c

Likely to refer to absence of overall single trend (1) recent change seems to indicate a trend – higher than average runoff (1) sustained for three years – first time on this rate (1) given above point – may suggest flooding is more likely to occur and more frequently (1). Reasons are valid as comment.

Maximum 4 description or comment.

**6 marks**

- (b)
- Steep slopes clearly apparent, e.g. 1091, 1090 (1) ∴ runoff over surface will be rapid (1) as water cannot soak in (1).
  - Height – over 200m in places (135903) (1) may exacerbate rainfall amounts due to air rising over relief (1)
  - Two rivers meet just outside port of Boscastle - 099912 (1) ∴ water from a wide area being taken through the river channel at Boscastle (1).
  - A number of rivers drain into this – e.g. confluences near Trafalgar, Trewold (1) ... increasing speed of runoff into main river (1).
  - Limited forest cover – e.g. along Valency to south – 1091 (1) ... low interception rates (1).
  - Narrow valley floor along river – shown by presence of contour (1) means nowhere for water to safely spill onto.
  - Built up area of Boscastle (1) creation of impermeable surfaces / drains encouraging surface runoff (1)

Allow 1 per basic point; 1+1 where developed. If particularly well developed allow up to 3. Expect development to be in form of explanation. Do not double credit the same reason under a different point.

**8 marks**

(c) Any valid label – 8 x 1 or possible 4 x 1+1 if elaborated and clearly detailed. Trigger must be from photograph.

Need to consider river channel ✓c– e.g. evidence of white/fast-flowing water (1) channel appears to be at bankfull (1) large amount of debris – trees etc. (1) ... piled up behind bridge (1) and Boscastle – water still clearly visible on road (1) murky – contains sediment from river (1) emergency workers on the road (1) damage to buildings (needs to be specific) debris on roads (1) cars clearly moved – 4 piled up outside house (1) mixture of concrete, boulders, trees (1) indicative of force of water – all tossed around and piled up outside house (1) relatively deep as indicated by window sills and gap to mud (1).

Features must be arrowed or written clearly on correct part of photograph.

Maximum 6, minimum 2 for either component.

**8 marks**

- (d) Boscastle – information relates only to natural causes.  
There is no reference made to human factors.  
Cause indicated as heavy rainfall, high springtide and all surface runoff being channelled back to sea via Boscastle.  
A combination of factors – all natural, noted. Should explain significance of factors noted in each location.

Bangladesh – different picture, natural causes clearly played a part – via heavy seasonal rain coupled with snow melt and delivery through Bangladesh in major rivers.

However, human activities are noted here – impact of deforestation, and implications of this, irrigation and global warming.

Assessment – indicate insignificance of human activities in Boscastle whilst seen as a contributing factor in Bangladesh.

May note that human activities make situation more extreme.

**Level 1**

1-3 marks

*Describes some of the causes of flooding in each area.*

*Heavy reliance on Figures 5a and 5b. Assessment not present.*

**Level 2**

4-6 marks

*Begins to explain the causes of flooding – may be all human*

*Uses information in Figures 5a and 5b – may be imbalanced.. Tentative assessment. Assessment may be within countries.*

**Level 3**

7-8 marks

*Clear and purposeful use of Figures 5a and 5b.*

*Fully aware of reasons for flooding, physical as well as human. Clear assessment of relative importance between countries.*

**8 marks**

- (e) Boscastle – responses reflect immediate rescue attempts. Infrastructure, emergency services clearly available – helicopters, fire engines.  
In immediate aftermath, area cleaned up – help to clear roads, deal with unsafe structures and try to make habitable. Minor injuries only.

Bangladesh – no evidence here of immediate response. Instead trying to deal with large scale devastation on a massive scale.

Food, fresh water shortages are clearly paramount, where these not considered at Boscastle.

Inadequate resources to cope with disaster.

Need to appeal for overseas help – not present at Boscastle.

Long term serious impacts much more difficult to deal with.

Comment should show an awareness that responses themselves are partly different – immediate emergency help not present;

don't have infrastructure at disposal;

need to rely on foreign aid;

length of time effects are serious.

Clear that scale is also different – local versus large scale; small number affected versus millions and effectiveness – strategies successful in implementation in Boscastle whereas struggling to have any real impact overall in Bangladesh.

	<p><b>Level 1</b>  <i>Describes the responses to flooding in both Boscastle and Bangladesh.                  May be imbalanced.                  Heavy reliance on figures 6a and 6b.                  Comment not made.</i></p>	1-3 marks
	<p><b>Level 2</b>  <i>Begins to use information on Figures 6a and 6b.                  Provides evidence to support contrasts in scale of response or effectiveness                  or may consider contrasts in responses.                  May focus more on one aspect than the other.                  Tentative comment ... with some awareness that other elements are present                  for top of level.</i></p>	4-6 marks
	<p><b>Level 3</b>  <i>Clear, purposeful use of Figures 6a and 6b. May be balance regarding                  scale and effectiveness contrasts, clearly aware of further contrasts –                  evidence provided for this as well as scale/effectiveness evaluation/comment                  clear and purposeful.</i></p>	7-9 marks
(f)	<p>(i) Any valid aim (1) +1 for development/elaboration (1) e.g. to determine whether (named village) is suburbanised (1). Does its land use reflect the suburbanised village model? (1) or is its population characterised by people in professional jobs working outside the village (1).                  If hypothesis only, maximum 1.</p>	<p><b>9 marks</b></p> <p><b>2 marks</b></p>
	<p>(ii) Item of primary data (must relate clearly to aim) – e.g. land use survey.                  Health and safety concern – need to cross busy main roads (1)                  Minimised via - crossing where pedestrian lights present if possible (1) taking care to ensure it was safe to cross (1).                  How it was collected – on large scale map/street plan (1) street surveyed for main use (1) such as very new housing – post 1990 (1) schools (1) – up to 2 for categories and this mapped via coding/letter system (1).                  Minimum 1 for health and safety concern, how minimised and data collection.                  Maximum 1 for health and safety concern; 2 for how minimised; 4 for data collection.</p>	<b>6 marks</b>

**SECTION B****Question 2**

- (a) (i) F/ Characteristics of factory – very large (1) single storey (1) flat roof (1) modern building materials/appearance (1)  
S/ Characteristics of site – very large (1) car parks adjacent (1) some for employees foreground (mixed colours) (1) some for production – top right (single colour) (1) appears flat / internal access roads clearly apparent between and around buildings (1). Large areas of open land for expansion (1).

Maximum 6, minimum 2 on any one aspect.

$8 \times 1 = 8$  – or if particularly detailed –  $(+1) \times 4 = 8$ ; any combination

**8 marks**

- (ii) Allow any relevant information regarding this as long as it is apparent from Figure 9

Situated next to A19 (1) approximately  $1\frac{1}{2}$  km from junction with A1231 (1) therefore very easy to get to via dual carriageway/different directions (1).

May consider needs met by access – components in/goods out (1) ... major routes located near junction, access N/S and W/E, allowing broader access – regional/national scales (1). Large built-up areas to east and west (1) suggesting proximity of labour force (1) ... in substantial numbers (1) ... only short distance away so limited distance to commute (1).

May note proximity of a local market (1) via built-up access ... likely to be some local main-dealers (1).

These are most obvious factors but allow others if relevant and justified.

1 per basic point; 1 + 1 per developed point via evidence/elaboration.

**5 marks**

- (b) Points from Figure 10:

- location is clearly accessible – via nearby A1 and other A roads – A6085/A69 running north of the site and A695 across the river
- on edge of Newcastle – so an adequate supply of labour likely
- site is flat, ease of building
- a riverside location – fashionable site
- variety of appropriate housing for management, e.g. Winlaton area and nearby villages to SW
- nearby facilities – Metro Centre
- recreation provision – for family – theme park (211 638), country park – 156 657; museum/leisure centre - 1665

Points from Figure 11:

- upmarket, prestigious buildings
- impressive modern entrance
- use clearly made of water feature
- variation in design enhances attractiveness of site
- surroundings will create appropriate atmosphere to encourage creativity of work force and quality
- in addition financial assistance available to offset initial investment costs

Points from Figure 12:

- in a regional context – site just as attractive – access to local markets in many nearby towns
- access by air to potential customers abroad (and more distant in UK)
- ports nearby for possible export to overseas market

**Level 1**

1-4 marks

*Describes features of development.*

*Describes features of OS map/Figure 10.*

*Heavy reliance on Figures – probably 11 and 12.*

**Level 2**

5-8 marks

*Begins to use information to answer question.*

*Refers to at least 2/3 Figures – may be emphasis on 1.*

*Some support in evidence from resources.*

*An awareness of advantages of the site.*

**Level 3**

9-12 marks

*Clear, purposeful use of information – seeks to persuade.*

*All Figures referred to but may be imbalanced.*

*Evidence from Figures used to support answers.*

*Clear understanding of the advantages of this site.*

- (c) Need to be aware of concept of globalisation – increasing links between countries/international links worldwide level (1) so that production of item requires many inputs worldwide (1). Allow up to 2 for definition and 3 for illustrating worldwide production e.g. relating to varied origins of inputs – inputs from South Asia such as rubber from Malaysia (1); North America – clay from South Carolina (1), Europe – e.g. dyes from UK (1) and New Zealand (Australasia) where wool going to England first (raw material) (1) and then back to Philippines (as cloth) (1)

Comment likely to consider reasons – such as to reduce overall production costs (1) or extent to which process represented on Figure 13 – with all continents involved except Africa (1) and some movement between UK and distant locations occurring 3 times (1) or interdependence (1).

6 × 1; maximum 2 for comment

**6 marks**

- (d) (i) 1 × 1 for bar  
2 × 1 for marking correct point; joining with straight lines.

**3 marks**

(ii) Figure 14:

- clearly a very large number of Malaysian factories – far more than all of other countries.
- these employ only as many as 40 American factories – less than an eighth of factories
- Apart from USA, investment mainly from other parts of Asia and Europe – Asian multinationals from larger countries employing generally more than European



Figure 15

- over time there has clearly been a dramatic increase in the number of factories and employees – clearly PDC has been a huge success ... with number of employees increasing from 45000 approximately 1980-90 to 90000 increase between 1998 and 2000.
- electronics industry is single most important one with approximately eight times more jobs than nearest rival. Relatively unique to older, more traditional industries which are present. Employment exceeds total for remaining categories put together whilst employment per factory can be seen to be relatively high in contrast to other categories.

Comment should relate to relative importance of countries of origin; number of factors/employment and change over time and type of industry.

**Level 1**

1-3 marks

*Describes information from Figures 14 and/or 15.  
There may be broad generalisations or step by step attention to detail.  
Perhaps a random structure.*

**Level 2**

4-6 marks

*Begins to use information in Figures 14 and/or 15.  
May be clear imbalance.  
Seeks to provide an overview.  
Offers some evidence in support.  
Tentative comment.*

**Level 3**

7-8 marks

*Clearly targets information to purpose.  
Uses both figures fairly equally.  
Clearly provides an overview.  
Offers evidence to support points made.  
Clear comment.*

**8 marks**

- (e) (i) Any valid aim (1) + 1 for elaboration/development, e.g. to determine whether River ....? changes downstream (1) ... does bed load reduce in size (1).

**2 marks**

- (ii) Item of primary data (must relate clearly to aim), e.g. bed load size.  
Health & Safety concern – need to enter water – hazard.  
Minimised via – ensuring it is no more than shin deep (1) relatively slow flowing (1).  
How was it collected – at right and left bank and every 50 cm (1) stand in river and reach down and pick up first piece (1) of bed load touched by forefinger (1) then measure size of material on long axis (1) using pebbleometer (1).  
Minimum 1 for health and safety concern, how minimised and data collection.  
Maximum 1 for health and safety concern, 2 for how minimised and 4 for data collection.

**6 marks**