



## **General Certificate of Education**

# **Geography 6036**

## *Specification B*

**GGB6      The Practical Paper**

# **Mark Scheme**

*2009 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.

Further copies of this Mark Scheme are available to download from the AQA Website: [www.aqa.org.uk](http://www.aqa.org.uk)

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# GGB6

## GENERAL GUIDANCE FOR GCE GEOGRAPHY ASSISTANT EXAMINERS

### General Instructions to Examiners on Marking

It is important that every Examiner marks the scripts to the same standard as the rest of the panel. All Examiners must operate the Marking Scheme in a similar and consistent manner, and hence, they must all participate in the application of that scheme at the Standardisation Meeting. In particular, they should take careful note of all decisions taken or changes made at the meeting. Examiners are allocated to a Team Leader for the period of examining, and any difficulties that arise should be discussed with that person.

### The Marking Scheme

The Marking Scheme consists of two sections for each question or sub-question – the Notes for Answers and the Mark Scheme itself.

#### Notes for Answers (NFA)

These indicate the possible content for the various sections of the question paper. In some cases (for example short answer questions) the NFA may indicate the only response that is acceptable, but in many cases, they indicate either a range of suitable responses, or an exemplar of the type of response required. Therefore, in most cases the NFA do **not** provide model answers, and should not be regarded as such. More NFA may be added at the standardisation meeting if it is felt by the Principal Examiner that details of appropriate ways of answering the question have been omitted.

#### The Mark Scheme

This is provided in italics and provides the instructions to Examiners as to how they are to assess the work of candidates. The number of marks allocated within the mark scheme to a question should correspond to the number of marks for that question on the question paper.

There are two ways in which the Mark Scheme operates:

- (a) it indicates how the marks to short answer questions are to be allocated – usually to a maximum of 4 marks.
- (b) it indicates how Examiners should move through the Levels in a level response mark scheme – usually to all questions of 5 marks or more. Each Level has a levels descriptor, with clear statements of the “triggers” to move candidates from one level to another. Each Level contains a range of marks as shown on the Mark Scheme.

A number of features have been used to distinguish between Levels, for example:

- a number of characteristics, reasons, attitudes etc.
- the degree of specification, for example the use of specific case studies, or accurate detail
- responses to more than one command word, for example, describe and suggest reasons
- the degree of linkage between two aspects of the question
- the depth of understanding of a concept.

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## The Marking Process

A sample of an Examiner's marked scripts will be marked again by a Senior Examiner according to the procedures set out by the Board. Also, the scripts may be re-examined at the Awards Meeting and the subsequent Grade Review. Therefore, it is most important that Examiners mark clearly according to the procedures set out below.

- All marking should be done in red.
- The right-hand margin should be used for marks only.
- The overall mark for a question must be ringed at the end of the answer.
- The total mark for the question must be transferred to the front of the script.
- The left-hand margin is where an indication of the level achieved is written.
- Comments and codes (see below) may also be written on the left.
- Indications of the levels achieved may also occur in the body of the answer if this is easier for the Examiner to apply (e.g. in the marking of diagrams).
- Ticks should be used for short answer responses and Level I responses only, with one tick representing one mark (to the maximum allowed in a Levels scheme).
- Levels 2, 3 and 4 should be indicated on the script, and this symbol should be used each time this Level is achieved. Examiners may wish to bracket an area of text where this level of response has been achieved.
- Once a candidate has reached Level 2, additional Level I credit should be indicated using a + symbol. If these points are of sufficient quality **one additional mark** can be awarded (assuming no further Level II points are made).
- Examiners may indicate strong Level 2 or 3 material by writing Level 2 (or 3) – 'good' in the left hand margin of the script. The Examiner should ensure that this is reflected in the **awarding of an appropriate number of marks** at the end of the answer.
- Level 3 is to be used only for questions of 9 marks or more, and Level 4 is to be used only for questions of 25 marks in total.

## Other Mechanics of Marking

- Underline all errors and contradictions.
- Cross out irrelevant sections using a line from top-left to bottom right. (However, be careful to check that there is no valid material, however brief, in the mass of irrelevance).
- Indicate repeated material with "rep".
- Other useful marking codes can be used, for example, "va" for vague, "NQ" or "Not Qu." for failure to answer the question, "Irrel" for irrelevant material, and "SIF" for self-penalising material.
- Put a wavy line in the left-hand margin to indicate weak dubious material.
- If the rubric is contravened, mark all answers but count only the best mark towards the candidate's total mark for the script. Put the mark for the question on the front of the script in the usual way, but also write "RAM Rubric" on the front of the script.
- Large areas of text must not be left blank – use the wavy line or write "seen" alongside the text.
- All pages must have an indication that they have been read, especially supplementary sheets.
- Unless indicated otherwise always mark text before marking maps and diagrams – do not give double credit for the same point made in the text and a diagram.

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## Quality of Language Descriptors

The following descriptors concerning the quality of language must be applied to **all** questions in which candidates are required to produce extended writing. To attain full marks available at a level of response, the appropriate Quality of Language descriptor must be achieved. Use the same quality of language levels as are used in the geographical element of the mark scheme under consideration.

### **Three-level descriptors**

- LEVEL 1**
- Style of writing is suitable for only simple subject matter.
  - Expression of only simple ideas, using a limited range of specialist terms.
  - Reasonable accuracy in the use of English.
- LEVEL 2**
- Manner of dealing with subject matter is acceptable, but could be improved.
  - Reasonable clarity and fluency of expression of ideas, using a good range of specialist terms, when appropriate.
  - Considerable accuracy in the use of English.
- LEVEL 3**
- Style of writing is appropriate to subject matter.
  - Organises relevant information and ideas clearly and coherently, using a wide range of specialist vocabulary, when appropriate.
  - Accurate in the use of English.

### **Two-level descriptors**

- LEVEL 1**
- Manner of dealing with subject matter is acceptable, but could be improved.
  - Reasonable clarity and fluency of expression of ideas, using a good range of specialist terms, when appropriate.
  - Considerable accuracy in the use of English.
- LEVEL 2**
- Style of writing is appropriate to subject matter.
  - Organises relevant information and ideas clearly and coherently, using a wide range of specialist vocabulary, when appropriate.
  - Accurate in the use of English.

**Question 1**

<b>1 (a)</b>	<b>Notes for answers</b>  The aim should be a general aim relating to the whole of the fieldwork enquiry.  The hypothesis or research question should show how the general aim was translated into a specific target.  The reference to the geographical principles studied needs to refer to classroom/textbook ideas and to show how these have been specifically used as a basis for the enquiry in the field.  <b>Mark scheme</b>  <b>Level 1 (1-3 marks)</b> Basic statements of: <ul style="list-style-type: none"><li>• aim</li><li>• hypothesis or research question</li><li>• principles</li></ul> gain 1 mark each.  <b>Level 2 (4-5 marks)</b> If the three basic statements are made and some clear relationship is established the answer moves into this level.  To reach the top of the level the answer should show very clear interrelationships between all three elements.	<b>5 marks</b>
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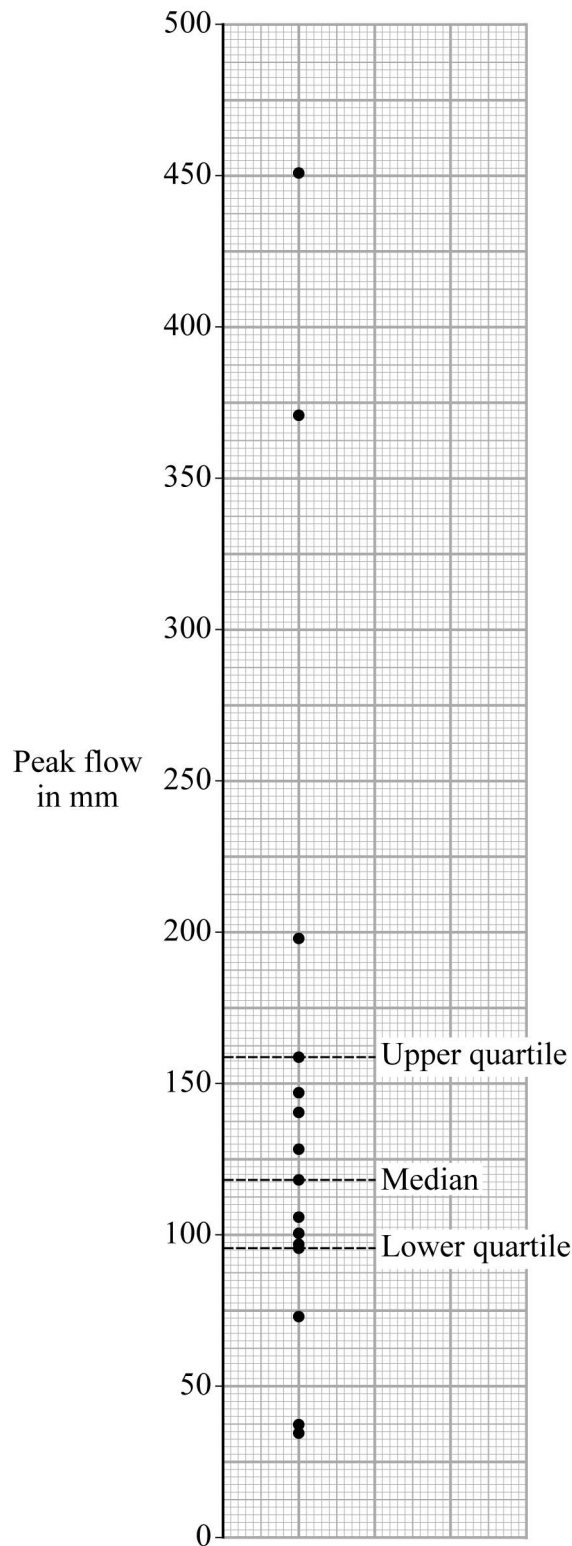
<b>1 (b)</b>	<p><b>Notes for answers</b></p> <p>Any method of data presentation, which can be linked to the hypothesis or research question, is acceptable. The answer should show how the technique was used: 'a handbook on how to use that technique.</p> <p>Diagrams are very suitable ways of showing the technique.</p> <p>Reasons for the suitability of the technique should include references to the clarity of the outcome, its usefulness in presenting the data to others and in clarifying it to the user and its suitability for use in the analysis of the data.</p> <p><b>Mark Scheme</b></p> <p><b>Level 1 (1-4 marks)</b> Basic identification of a technique Simple description of the technique. Reference to the appropriateness of the chosen technique is basic and only shows limited understanding.</p> <p><b>Level 2 (5-7 marks)</b> The answer describes the method clearly. The method is clearly linked to the aim of the investigation. Clear reasons are given for the choice of method.</p> <p>The answer should show a clear awareness of the strengths of the technique used, and explain these strengths.</p>	<b>7 marks</b>
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1 (c)	<p><b>Notes for answers</b></p> <p>The answer must be based on fieldwork that has been carried out by the candidate. It might refer to both primary and secondary data. Ideally it should be written in the first person. It should be internally consistent and, ideally should show a sense of place.</p> <p>A good answer requires some appreciation of the geographical significance of the results and how the results relate to geographical principles.</p> <p>There should be some attempt to evaluate the results.</p> <p>The results should be considered in the context of the aim and/or of the specific environment being considered.</p> <p>There should be some consideration of the way in which the study has confirmed, reinforced, or perhaps even contradicted previous understanding.</p> <p>There are likely to be some anomalies worthy of mention and discussion.</p> <p><b>Mark scheme</b></p> <p><b>Level 1 (1-4 marks)</b>  A 'textbook' answer with little reference to the personal study. The answer is presented in general terms with no direct reference to the candidate's own results.</p> <p>Any attempts to relate findings to understanding are written in the most general terms.</p> <p>The answer does not present a clear conclusion supported by evidence.</p> <p><b>Level 2 (5-8 marks)</b>  The answer establishes some clear connection between the results and the candidate's understanding of the environment and/or principles being studied.</p> <p>The answer reaches a clear and valid conclusion, which is related to the aim and/or hypothesis/research question and is supported with evidence.</p> <p>At the top of Level 2, the answer is thorough and well developed. There is a clear sense of place and the candidate makes detailed reference to the actual data collected and to the conclusions that can be drawn from these data.</p>	8 marks
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2 (a)(i)

Notes for answers

4 marks



**Mark scheme**

Allow 1 mark for completion of a sensible scale with key.  
 Allow 3 × 1 mark for accurate plotting of points.  
 (Delete 1 mark for each wrong plot.)

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<b>2 (a)(ii)</b>	<b>Notes for answers</b>  <i>See diagram on page 9</i> Median = 118 UQ = 159 LQ = 96  <b>Mark scheme</b>  Allow 3 × 1 mark for each correctly plotted line.	<b>3 marks</b>
<b>2 (a)(iii)</b>	<b>Notes for answers</b>  Range = 417 IQR = 63  <b>Mark scheme</b>  2 × 1 mark	<b>2 marks</b>

2 (b)	Notes for answers				7 marks
	Recording	Stream <b>B</b> (mm)	$x - \bar{x}$	$(x - \bar{x})^2$	
	1	198	47.6	2265.76	
	2	371	220.6	48 664.36	
	3	127	-23.4	547.56	
	4	148	-2.4	5.76	
	5	101	-49.4	2440.36	
	6	73	-77.4	5990.76	
	7	36	<u>-114.4</u>	<u>13 087.36</u>	
	8	34	<u>-116.4</u>	<u>13 548.96</u>	
	9	159	8.6	73.96	
	10	141	-9.4	88.36	
	11	451	300.6	90 360.36	
	12	118	-32.4	1049.76	
	13	106	-44.4	1971.36	
	14	97	-53.4	2851.56	
	15	96	-54.4	2959.36	
					(159 269.28)
	Total	2256	$\sum (x - \bar{x})^2$	<u>185 905.60</u>	
	Mean ( $\bar{x}$ ) =	150.4			
			$\sum \frac{(x - \bar{x})^2}{n}$	<u>185 905.60</u>	= <u>12 393.71</u>
			SD =	<u>111.33</u>	
	<b>Mark scheme</b>				
	7 × 1 mark				
	Allow 1 mark for each correct figure entered in the sum.				
	But if SD = 111.33 go straight to 7				
	If a candidate has made an error in 1 <sup>st</sup> , 2 <sup>nd</sup> or 3 <sup>rd</sup> stages, allow marks for subsequent stages if consistent with the earlier wrong figure.				
	Except <b>never</b> allow a mark for a wrong SD.				

2 (c)	<p><b>Notes for answers</b></p> <table border="1" data-bbox="351 302 1241 806"> <thead> <tr> <th></th> <th><b>Stream A</b></th> <th><b>Stream B</b></th> </tr> </thead> <tbody> <tr> <td>Total</td> <td>2269</td> <td>2256</td> </tr> <tr> <td>Mean</td> <td>151.27</td> <td>(150.4)</td> </tr> <tr> <td>Median</td> <td>141</td> <td>(118)</td> </tr> <tr> <td>UQ</td> <td>159</td> <td>(159)</td> </tr> <tr> <td>LQ</td> <td>126</td> <td>(96)</td> </tr> <tr> <td>IQR</td> <td>33</td> <td>(63)</td> </tr> <tr> <td>SD</td> <td>38.70</td> <td>(111.33)</td> </tr> </tbody> </table> <p>The two totals and means are very similar and their UQs are identical, so it might appear as though the streams are very similar.</p> <p>However, there is much more variation in the flow of stream B. Its median flow is considerably lower than that of stream A, suggesting that B generally has a lower flow than A, but has occasional very high flows.</p> <p>Stream B's lowest flow and its LQ are also considerably lower than A's, reinforcing that suggestion.</p> <p>However, B's highest flow is much higher than A's, so when in flood the volume of B rises quickly and reaches a higher total flow. Allow credit for reference to the candidate's own calculations.</p> <p><b>Mark scheme</b></p> <p><b>Level 1 - (1-4 marks)</b> The answer is basic. At the lowest level the candidate simply lifts figures from the table without referring to the statistical indicators.</p> <p>At the top of the level the candidate quotes the various indicators of variation without being aware of their significance.</p> <p><b>Level 2 - (5-8 marks)</b> The answer is clear and shows understanding of the indicators of variation.</p> <p>If one indicator is quoted, understood and compared the answer reaches the bottom of the level.</p> <p>As more measures are quoted, understood and compared the mark moves towards the top of the level.</p>		<b>Stream A</b>	<b>Stream B</b>	Total	2269	2256	Mean	151.27	(150.4)	Median	141	(118)	UQ	159	(159)	LQ	126	(96)	IQR	33	(63)	SD	38.70	(111.33)	8 marks
	<b>Stream A</b>	<b>Stream B</b>																								
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<b>2 (d)</b>	<b>Notes for answers</b>  Size of the basins. Geology. Slopes. Soil type and depths. Nature of the vegetation cover. Agricultural practices. Buildings, etc.  <b>Mark scheme</b>  <b>Level 1 (1-3 marks)</b> At least one factor is mentioned but the justification is basic.  <b>Level 2 (4-6 marks)</b> At the bottom of the level at least two factors are mentioned and clearly justified.  As more factors are mentioned and justified the answer moves towards the top of the level. Four factors, well justified, can reach the top of the level.	<b>6 marks</b>
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