



Rewarding Learning

**ADVANCED
General Certificate of Education
2018**

Geography
Assessment Unit AS 3

assessing

Fieldwork Skills and Techniques in Geography

[SGG31]

THURSDAY 31 MAY, MORNING

**MARK
SCHEME**

General Marking Instructions

Introduction

The main purpose of the mark scheme is to ensure that examinations are marked accurately, consistently and fairly. The mark scheme provides examiners with an indication of the nature and range of candidates' responses likely to be worthy of credit. It also sets out the criteria which they should apply in allocating marks to candidates' responses.

Assessment objectives

Below are the assessment objectives for GCE Geography.

Candidates should be able to:

- AO1:** Demonstrate knowledge and understanding of places, environments, concepts, processes, interactions and change at a variety of scales.
- AO2:** Apply knowledge and understanding in different contexts to analyse, interpret and evaluate key concepts, information and issues.
- AO3:** Use a variety of relevant methods, and techniques to:
- investigate geographical questions and issues;
 - analyse, interpret and evaluate data and resources; and
 - construct arguments and draw conclusions.

Quality of candidates' responses

In marking the examination papers, examiners should be looking for a quality of response reflecting the level of maturity which may reasonably be expected of a 17 or 18-year-old which is the age at which the majority of candidates sit their GCE examinations.

Flexibility in marking

Mark schemes are not intended to be totally prescriptive. No mark scheme can cover all the responses which candidates may produce. In the event of unanticipated answers, examiners are expected to use their professional judgement to assess the validity of answers. If an answer is particularly problematic, then examiners should seek the guidance of the Supervising Examiner.

Positive marking

Examiners are encouraged to be positive in their marking, giving appropriate credit for what candidates know, understand and can do rather than penalising candidates for errors or omissions. Examiners should make use of the whole of the available mark range for any particular question and be prepared to award full marks for a response which is as good as might reasonably be expected of a 17 or 18-year-old GCE candidate.

Awarding zero marks

Marks should only be awarded for valid responses and no marks should be awarded for an answer which is completely incorrect or inappropriate.

Marking calculations

In marking answers involving calculations, examiners should apply the 'own figure rule' so that candidates are not penalised more than once for a computational error. To avoid a candidate being penalised, marks can be awarded where correct conclusions or inferences are made from their incorrect calculations.

Types of mark schemes

Mark schemes for tasks or questions which require candidates to respond in extended written form are marked on the basis of levels of response which take account of the quality of written communication.

Other questions which require only short answers are marked on a point for point basis with marks awarded for each valid piece of information provided.

Levels of response

In deciding which level of response to award, examiners should look for the 'best fit' bearing in mind that weakness in one area may be compensated for by strength in another. In deciding which mark within a particular level to award to any response, examiners are expected to use their professional judgement.

The following guidance is provided to assist examiners.

- **Threshold performance:** Response which just merits inclusion in the level and should be awarded a mark at or near the bottom of the range.
- **Intermediate performance:** Response which clearly merits inclusion in the level and should be awarded a mark at or near the middle of the range.
- **High performance:** Response which fully satisfies the level description and should be awarded a mark at or near the top of the range.

Quality of written communication

Quality of written communication is taken into account in assessing candidates' responses to all tasks and questions that require them to respond in extended written form. These tasks and questions are marked on the basis of levels of response. The description for each level of response includes reference to the quality of written communication.

For conciseness, quality of written communication is distinguished within levels of response as follows:

Level 1: Quality of written communication is basic.

Level 2: Quality of written communication is good.

Level 3: Quality of written communication is excellent.

In interpreting these level descriptions, examiners should refer to the more detailed guidance provided below:

Level 1 (Basic): The candidate makes only a limited selection and use of an appropriate form and style of writing. The organisation of material may lack clarity and coherence. There is little use of specialist vocabulary. Presentation, spelling, punctuation and grammar may be such that intended meaning is not clear.

Level 2 (Good): The candidate makes a reasonable selection and use of an appropriate form and style of writing. Relevant material is organised with some clarity and coherence. There is some use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are sufficiently competent to make meaning clear.

Level 3 (Excellent): The candidate successfully selects and uses the most appropriate form and style of writing. Relevant material is organised with a high degree of clarity and coherence. There is widespread and accurate use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are of a sufficiently high standard to make meaning clear.

General Descriptions for Marking Criteria

Knowledge and Understanding	Skills	Quality of Written Communication	Level
The candidate will show a wide-ranging and accurate knowledge and a clear understanding of the concepts/ideas relevant to the question. All or most of the knowledge and understanding that can be expected is given.	The candidate will display a high level of ability through insightful analysis and interpretation of the resource material with little or no gaps, errors or misapprehensions. All that is significant is extracted from the resource material.	Excellent quality of written communication. The candidate will express complex subject matter using an appropriate form and style of writing. Material included in the answers will be relevant and clearly organised. It will involve the use of specialist vocabulary and be written legibly and with few, if any, errors in spelling, punctuation and grammar.	3
The candidate will display an accurate to good knowledge and understanding of many of the relevant concepts/ideas. Much of the body of knowledge that can be expected is given.	The candidate will display evidence of the ability to analyse and interpret the resource material but gaps, errors or misapprehensions may be in evidence.	Good quality of written communication. The candidate will express ideas using an appropriate form and style of writing. Material included will be relevant and organised but arguments may stray from the main point. Some specialist terms will be used and there may be occasional errors in spelling, punctuation and grammar. Legibility is satisfactory.	2
The candidate will display some accurate knowledge and understanding but alongside errors and significant gaps. The relevance of the information to the question may be tenuous.	The candidate will be able to show only limited ability to analyse and interpret the resource material and gaps, errors or misapprehensions may be clearly evidenced.	Basic quality of written communication. The candidate will have a form and style of writing which is not fluent. Only relatively simple ideas can be dealt with competently. Material included may have dubious relevance. There will be noticeable errors in spelling, punctuation and grammar. Writing may be illegible in places.	1

- 1 (a) Answers will vary depending on the fieldwork undertaken and the planning factor selected.

Award [3]–[4] for an answer which fully and coherently addresses the contribution of the selected factor to fieldwork planning and which makes convincing and explicit links to the individual fieldwork.

Award [1]–[2] for a more simplistic response which may fail to develop the contribution of the selected factor to fieldwork planning. Fieldwork links may be less convincing.

(2 × [4])

Maximum [2] if not referenced to fieldwork planning. [8]

- (b) (i) Mark breakdown is as follows:

- Title [1]: must be specific and accurate.
- Conventions [2]: for labelling of axes (variables and units):
 - inclusion of key (if appropriate);
 - for correct identification of dependent and independent variables;
- &
- for scaling of graph to encompass all values.
- Accuracy [3]: for accurate plotting of data selected from table.
- Method [1]: for selection of an appropriate graphical representation method (e.g. a line graph will require a continuous variable).

Annotate as follows:

T = [1]

C = [2]

A = [3]

M = [1]

[7]

- (ii) As required by the question, the factor discussed must relate to one variable displayed in the graph.

Award [0] for an answer not worthy of credit.

Level 3 ([4]–[5])

The candidate provides a detailed explanation of how the chosen factor influenced, either positively or negatively, the accuracy of the data collected in the field. There are clear and convincing references to the candidate's own fieldwork. Quality of written communication is excellent.

Level 2 ([2]–[3])

An accurate but less detailed response. While an appropriate factor is identified, the discussion concerning its influence on the accuracy of the data collected may be restricted in depth and detail. References to the candidate's fieldwork may be less convincing. Quality of written communication is good.

Level 1 ([1])

A simplistic response. The discussion concerning the influence of the factor may be basic, tenuous and/or lacking reference to the candidate's own fieldwork investigation. Quality of written communication may be basic.

[5]

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- (c) There are **two** key elements in the question. Candidates must explain the purpose of statistical analysis in a fieldwork investigation and justify the statistical method selected as suitable for **their** fieldwork.

Statistical analysis can reliably inform the hypothesis testing process and direct the course of the investigation. It can aid data interpretation and the formulation of reliable geographical conclusions. Statistical analysis can allow voluminous raw values to be condensed into a concise and meaningful mathematical form and can provide an objective measure of significance. It is invaluable in helping to summarise or interpret aspects of geographical data.

Statistical analysis is necessary to provide proof which is essential to accept or reject a hypothesis. The type of statistical method selected for analysis will depend on the aim/hypothesis of the investigation and the nature of the study.

Award [0] for an answer not worthy of credit.

Level 3 ([5]–[6])

The candidate provides a detailed explanation for the purpose of statistical analysis in fieldwork investigations. They clearly justify, with reference to their aim, the reasons why their chosen statistical method was selected as suitable for their investigation.

Level 2 ([3]–[4])

This is still a good answer. One element of the question, either the purpose of statistical analysis or justification of their method, may be missing. Alternatively, both elements have been addressed but the level of detail is less.

Level 1 ([1]–[2])

A basic response. There is a restricted understanding of the purpose of statistical analysis in fieldwork and its role in the fieldwork undertaken. Language use may be poor.

[6]

- (d) Answers will vary according to the fieldwork undertaken.

Award up to [2] for the description of a valid, focused and realistic extension to the current fieldwork.

Award up to [2] for a coherent and relevant explanation of the extension in relation to the increased reliability of the geographical conclusions drawn. (2 × [2]).

If there is no explicit link to their fieldwork, maximum [1]

[4]

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30

- 2 (a) (i) • The course of the River Usk/Afon Wysg [2]. If not labelled [1].
 • The National Park boundary [1]. If not labelled [0].
 • One spot height (height should be labelled) [1]. Accept air survey heights; not contour lines.
 • One tourist activity or facility [1]. Accept any reasonable tourist attraction.
 Award mark for each feature only if labelled. [5]
- (ii) River Level:
 • Award [2] for 4 accurately plotted points
 • Award [1] for 2–3 accurately plotted points
 • Award [0] for fewer than 2 accurately plotted points.
- Rainfall:
 • Award [2] for 5 accurately drawn bars
 • Award [1] for 3–4 accurately drawn bars
 • Award [0] for fewer than 3 accurately drawn bars.
- Award [1] for completion of line graph.
 Award [1] for shading and/or lines on bars. [6]
- (iii) 2.3 [1]
- (iv) Possible answers include:
- **Relief:** The monitoring station is located in the Usk Valley. A number of hills (250m at GR 035272; 293m at GR 048269) surround the monitoring station which is less than 140m above sea level. Steep slopes are likely to encourage large amounts of surface runoff following a significant rainfall event, such as that between 1800 hours and 2200 hours on 3rd December 2015, leading to a rapid increase in the river level.
 - **Land use:** The monitoring station is located to the west of the town of Brecon. Impermeable surfaces prevent infiltration and increase surface runoff, thus increasing the amount of water in the river channel. Urban drainage systems also divert surface water into the river.
- Accept valid alternatives. Factors not shown on the OS map are not acceptable.
- Award [0] for an answer not worthy of credit.
- Level 3 ([5]–[6])**
 The candidate fully explains two valid factors clearly using map evidence. Quality of written communication is excellent.
- Level 2 ([3]–[4])**
 While two valid factors are discussed, the level of detail is less. Alternatively, one developed factor can achieve this level. There may be restricted use of map evidence. Quality of written communication is good.
- Level 1 ([1]–[2])**
 Candidates who discuss one factor will be restricted to this level. Alternatively, candidates may fail to use explicit map evidence. Quality of written communication may be basic. [6]

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<p>(b) (i) Potential limitations/weaknesses may include:</p> <ul style="list-style-type: none"> • All statements are predetermined and therefore they provide no scope for visitors to express their individual views (unlike open-ended questions). There is no scope for adding additional information on personal opinions. • Visitors may find the discrete response categories too constrictive as one response may not be appropriate for the entire National Park. • Given the range of options in the scale, analysis can be complex and time consuming. <p>Award [2] for a fully developed explanation. Award [1] for a partially developed explanation. [2]</p> <p>(ii) Question 3 has overlapping categories. Question 5 has no “other”. Accept a second (different) weakness for Question 7. [1]</p> <p>(iii) Survey site: it is important that the survey is conducted in an area with a sufficient number of tourists who can complete the survey. Conducting the survey in a honeypot site, for example, would allow for the collection of data which is representative of the population. Day of the week: representative and reliable data is more likely to be collected during peak tourist times. There is likely to be more tourists at weekends. Conducting the survey between Friday and Sunday will ensure that a sufficient number of questionnaires are completed. This will help to yield more reliable data. Month of the year: representative and reliable data is more likely to be collected during the summer months when more tourists visit the park. Conducting the survey in July/August will yield more representative data than in December/January, for example.</p> <p>Award [3] for an explanation which is developed in the context of the fieldwork survey and which demonstrates how full consideration of the chosen factor will help to yield more reliable/representative data.</p> <p>Award [1]–[2] for a general explanation. Answers may not be developed in the context of the fieldwork survey and/or may fail to make a connection between the chosen factor and the collection of reliable/representative data. [3]</p> <p>(iv) (1) 41 (Accept 41.4) [1] 36 (Accept 35.64) [1] [2]</p> <p>(2) 4 correct segments [3] 3 correct segments [2] 2 correct segments [1] Labels [1] Allow for incorrect answers in (iv) (1) to be carried through to (iv) (2) without penalty. [4]</p>	<p>Total [4]</p>
	30
	60

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