

General Certificate of Education June 2010

Geography
Geographical Skills

GEOG2

Unit 2

Mark Scheme

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

Copyright © 2010 AQA and its licensors. All rights reserved.

COPYRIGHT

AQA retains the copyright on all its publications. However, registered centres for AQA are permitted to copy material from this booklet for their own internal use, with the following important exception: AQA cannot give permission to centres to photocopy any material that is acknowledged to a third party even for internal use within the centre.

Set and published by the Assessment and Qualifications Alliance.

GEOG2 General Guidance for GCE Geography Assistant Examiners

Marking – the philosophy

Marking should be positive rather than negative.

Mark schemes – layout and style

The mark scheme for each question will have the following format:

- a) Notes for answers (nfa) exemplars of the material that might be offered by candidates
- b) Mark scheme containing advice on the awarding of credit and levels indicators.

Point marking and Levels marking

- a) Questions with a mark range of 1-4 marks will be point marked.
- b) Levels will be used for all questions with a tariff of 5 marks and over.
- c) Two levels only for questions with a tariff of 5 to 8 marks.

Levels Marking – General Criteria

Everyone involved in the levels marking process (examiners, teachers, students) should understand the criteria for moving from one level to the next – the "triggers". The following general criteria are designed to assist all involved in determining into which band the quality of response should be placed. It is anticipated that candidates' performances under the various elements will be broadly inter-related. Once the Level has been determined, examiners should initially set the mark at the middle of the mark range for that level (or the upper value where no mid value exists). Then refine the mark up or down using the General Criteria, Notes For Answers and the additional question specific levels guidance. Further development of these principles will be discussed during Standardisation meetings. In broad terms the levels will operate as follows:

Level 1: attempts the question to some extent (basic)

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 terms 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: answers the question (well/clearly)

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
- give a number of characteristics, reasons, attitudes ("more than one") where the question requires it
- provide detailed use of case studies
- give responses to more than one command e.g. "describe and explain."
- 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.

CMI+ annotations

- The annotation tool will be available on all questions.
- Where an answer is marked using a levels response scheme the examiner should annotate the script with 'L1', 'L2' or 'L3 at the point where that level has been reached. At each point where the answer reaches that level the appropriate levels indicator should be given. In addition examiners may want to indicate strong material by annotating the script as "Good Level...". Further commentary may also be given at the end of the answer. Where an answer fails to achieve Level 1 zero marks should be given.
- Where answers do not require levels of response marking, the script should not be annotated. For point marked questions where no credit-worthy points are made, zero marks should be given.

Other mechanics of marking

- Various codes may be used such as: 'rep' (repeated material), 'va' (vague), 'NAQ' (not answering question), 'seen', etc.
- Unless indicated otherwise, always mark text before marking maps and diagrams. Do not give double credit for the same point in text and diagrams.

Question 1		
1 (a) (i)	1 mark for each accurate plot (2 x 1). Max 1 if plots not joined up, or key not used properly.	(2 marks)
		AO3 - 2
1 (a) (ii)	One mark for each valid point e.g. India's increase is set to be much steeper than China's to 2030 resulting in India overtaking China's population by around 2030. China's peak population appears around 2030, whereas India's continues to grow well beyond 2050 according to the trend in the graph. China's population continues to fall to 2050, widening the gap between it	(4 marks) AO2 – 3 AO3 – 1
	and India. Allow 1 mark for manipulation of data. No double crediting same overall point. Max 3 if no comparison statement between countries.	
1 (b) (i)	1 mark for each accurate segment (3 x 1). (While two correct segments automatically produces the third, 3 marks gives credit for the calculation of the degrees +/- 5°). Segments need not be in correct order or start at 12 o'clock. Shading or labelling should match the key (max 2 if not) Correct degrees are 68°, 227°, 65°.	(3 marks)
		AO3 – 3
1 (b) (ii)	One mark for each valid point e.g. Population is projected to grow by 47.4% (or 518 million). The relative proportions of each age group have shifted significantly. For example, the 14s and under have dropped by almost 18% by 2050, the 15-64 age group has increased by almost 51% and the 65+ age group has increased by almost six-fold. Overall accurate statement. Allow 1 mark for the manipulation of data. Reserve 1 mark for reference to population total. Max 1 mark for only lifting from table.	(4 marks)
		A02 – 2 A03 – 2
1 (c) (i)	1 mark for each accurate plot (3 x 1). Either use of key or dates is needed.	(3 marks)
	Max 2 if shading or dates are absent but plotting is accurate.	AO3 – 3

1 (c) (ii) Notes for answers

(5 marks)

This response does not require specific knowledge of India in order to score full marks. Any reasonable factors offered can score credit.

AO1 – 4 AO2 – 1

Cities are growing for many different reasons for example:

- birth rate is a major factor affecting the growth of cities in India
- rural to urban migration is still an important consideration, with valid reference to push and pull factors
- improved health care and diet is responsible for lowering the death rate, thus contributing to overall growth of cities
- some may comment on the larger increases in Kolkata, Delhi and Mumbai, making links to their regional centre status, attracting further migrants for employment opportunities.

Level 1 (1-3 marks)

A limited awareness, perhaps misunderstanding the context of the question at the bottom end.

Likely to show only a basic awareness of factors affecting growth. May only consider one factor. Listing with very basic development.

Level 2 (4-5 marks)

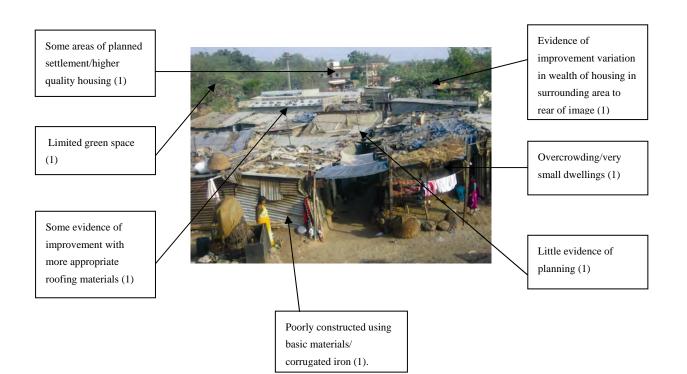
Clearly aware of the urban theme of question. Shows knowledge and understanding of the factors affecting the growth of cities in such locations. More than one factor suggested for L2. For full marks must specifically refer to either birth rate or inward migration.

1 (d) Candidates should clearly point out their chosen characteristics.

No credit to be awarded without clear use of arrows or lines pointed at chosen characteristics. No credit for pointing out that which is not displayed (such as sanitation/drinking water).

(4 marks)

AO2 - 2 AO3 - 2



Question 2

2 (a) Notes for answers

(5 marks)

Candidates are expected to refer to the background material which formed the basis of the study. They can refer to any reasonable source including textbooks, internet, newspaper article, local government document etc. The key points are that:

AO3 - 5

- there must be some link to the specification
- the idea/concept/theory which shaped the enquiry becomes clear.

E.g. 'I decided to investigate the changing characteristics of the River Exe. The theory I decided to focus on was the Bradshaw Model. This suggests that, in most rivers, similar changes occur downstream from source to mouth. We focused upon three of these theoretical assumptions. The first part of the theory is that river velocity increases downstream, despite the gradient decreasing. It does this because the frictional drag of the bed and banks is reduced as channel efficiency increases'and so on.

Level 1 (1-3 marks)

A basic understanding shown. Shows limited awareness of the basis of the investigation, with perhaps vague references to underpinning theory/concept or idea. Lacking specific detail.

Level 2 (4-5 marks)

A clear idea of the basis of the investigation. Detailed understanding of the theory/concept or idea. Specific detail linked to investigation.

2 (b) (i)

Qualitative data involves the collection of opinions, perspectives, thoughts and feelings. More subjective in nature. Examples of qualitative data include open-ended questionnaire responses or conversation analysis.

(3 marks)

AO3-3

Quantitative data is numerical in form. More objective in nature. Examples include pedestrian counts or beach profile measurements.

Max 2 with no example.

Max 2 with only one definition.

Max 1 with examples only.

2 (b) (ii) Notes for answers

(6 marks)

Responses should show an understanding of the stages involved in data collection. Those who choose primary data collection should describe each stage of the data collection process including sampling if appropriate.

AO3 - 6

For secondary data, there should be identification of the source and description related to the selection / filtering of the data.

E.g. 'In order to measure the cross-sectional area of the River Exe, we stood on opposite sides of the channel and used a tape measure to measure the width from where the dry bank met the water to the corresponding point on the other side. In order to avoid drag, the tape was pulled tight at 90° to the flow of the river, and held 20cm above the water line. Then, at regular intervals of 30cm we used a metre ruler to measure the depth. This was done by placing the ruler into the water until it met the river bed. Intervals of 50cm were used when the river became wider. The method was repeated at regular intervals downstream' and so on.

Level 1 (1-4 marks)

A vague description which shows a basic awareness of the data collection process. May include some elements of the process, but show some obvious omissions. May also give a sense that the method has not been completed in full.

Level 2 (5-6 marks)

Clearly aware of the stages involved in the data collection process. Method able to be replicated solely from the information given. Detailed description.

2 (b) (iii)

1 mark for each valid and sequential point made. For 4 marks technique should be able to be replicated (at least in part) from information given.

(4 marks)

AO3 - 4

E.g. 'I chose an appropriate graphing scale in order to make my line graph proportional to the cross section I recorded in the field. I held the page landscape to allow me to accurately reflect the width of the channel. For the axis, I started with 0 at the top in order to accurately show depth. Points were marked on the graph at the same interval used in the field.

A smooth line was used to join up the points' and so on.

Allow 1 mark for appropriate naming of each axis and / or appropriate title.

2 (c) Notes for answers

(7 marks)

Responses are required to show an understanding of the ongoing process of evaluation (e) in fieldwork investigations and subsequent write-up.

AO2 - 3 AO3 - 4

Responses should also comment on the strengths (s) and weaknesses (w) of different aspects of the investigation, as well as offering improvements (i).

E.g. 'My investigation was broadly successful at meeting its original aim (e), though there were many different strengths and weaknesses/areas for improvement. For example, I expected that channel width and depth would increase downstream and our method was designed to investigate this. However, I only visited six sites and it was difficult to draw valid conclusions from the number of sites I visited. At each site I only did the cross-section measurement once (w). It might have been better to do two or three cross-sections at each site in order to get clearer evidence (i). I took no account of the changing nature of the bedrock and this is known to impact upon the shape of the channel (w).

The presentation technique I used was a line graph to show the changing cross-section. While this was a simple and very accurate way of transforming the data (s), it is very difficult to get the correct scale to reflect the actual cross-sectional area (w). For example, when I used a proportional scale at the source of the river (site 1), the channel was barely visible as the water was so shallow (w). I therefore had to modify the scale, by doubling the depth measurements (i). This was a significant limitation of the technique (e)'and so on.

Level 1 (1-4 marks)

Shows a basic awareness of evaluation. May consider only one aspect of the study at a limited level. Lacking explicit evaluative comment. For top of level, there should be some awareness of the weaknesses.

Level 2 (5-7 marks)

Clearer awareness of the evaluation process. May still only consider one aspect of the study such as method, but considers this in detail. Considers strengths and weaknesses and areas for improvement. For full marks there should be more than one aspect of the investigation evaluated and there should be some explicit evaluative comment.