



General Certificate of Education

Geography 6036

Specification B

GGB4

Mark Scheme

2006 examination – June 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 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.

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 II, III and IV should be indicated with a Roman II, III or IV 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 II, 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 II or III material by writing "Level II (or III) – "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 III is to be used only for questions of 9 marks or more, and Level IV 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.

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**(a) Distribution of the hazard:**

<u>Tropical Cyclone</u>	<u>Burglary</u>
Latitude 5-20 N and S	Inner city areas rather than outer suburbs
Caribbean Sea/Gulf of Mexico	Low numbered post codes
Bay of Bengal Sea areas of over 26	Element of distance decay from home of criminal
N W Australia	Some screened urban fringe houses at risk

Level 1 – generalised statements of distribution; simplified description. (0-2 marks)

Level 2 – specific and detailed statements of distribution; named locations access this level (3-5 marks)

(b) Evidence of prediction:

<u>Tropical Cyclone</u>	<u>Burglary</u>
Measurements of sea temperatures	Police records
Measurements of air pressures	British Crime survey
Satellite tracking	Insurance records
Historic routes of cyclones	Media reports - newspapers

Level 1 – generalised statements of distribution; simplified description. (0-2 marks)

Level 2 – specific and detailed statements of evidence. (3-5 marks)

(c) Effects:

Case studies will be key elements here.

<u>Tropical Cyclone</u>	<u>Burglary</u>
Human casualties if not evacuated	Removal of goods
Loss of crops, animals	Damage to property by gaining of entry
Flooding of land	Invasion of privacy
Damage to property	Psychological damage
Transport routes destroyed	Subsequent effects due to fear (over-locked)
Large insurance losses	
Homelessness and disease	

Level 1 – simple statements of effects, which could apply to any such hazard. No specific detail provided. (0-3 marks)

Level 2 – specific statements, which can be clearly attributed to named hazard(s) access this level. (4-7 marks)

(d) Responses

<u>Tropical Cyclone</u>	<u>Burglary</u>
Evacuation	Crime prevention schemes
Early warning systems and use of satellites	Security devices and schemes
Attempts to seed storms to reduce strength	Neighbourhood Watch schemes
Planning schemes to reduce potential damage	Community schemes – CCTV
Flood barriers, dykes	Defensible space schemes

Level 1 – simple statements of management strategies, which could apply to any such hazard. No specific detail provided. (0-3 marks)

Level 2 – specific statements of management strategies, which can be clearly attributed to named hazard access this level. (4-8 marks)

Total for question 1 = 25 marks

Question 2**(a) Soil profile characteristics**

<u>Brown earths</u>	<u>Podsols</u>	<u>Gleys</u>
No clear horizons	Distinct horizons	Waterlogged nature
Mull humus	Mor humus	Thick peat deposit
Lighter with depth	Bleached layer	Blue grey colour
Rich in fauna	Limited fauna	Limited fauna
Clay enrichment at depth	Iron pan	Mottling
	Clay enrichment at depth	

Level 1 – two elements of description, such as type of humus, nature of horizons. (0-2 marks)

Level 2 – more detail to description, more than two clear characteristics. Credit linkages between characteristics here. (3-5 marks)

(b) Indicators needed:

For all:
 Soil texture – relative proportions of sands, silts and clays
 Soil horizon depths
 Soil acidity – pH values
 Soil organic content
 Soil water content
 Cation exchange capacity?

Level 1 – simple statements of indicators as given above; or development of one indicator only. (0-2 marks)

Level 2 – development of at least two indicators. (3-5 marks)

(c) Processes:

<u>Brown earths</u>	<u>Podsols</u>	<u>Gleys</u>
Leachings	Podsolisation	Surface water gleys
Lessivage	Lessivage	Ground water gleys

Level 1 – list of simple statements such as level of ppt/evt, and nature of vegetation with no real depth of understanding of process.

(0-3 marks)

Level 2 – greater depth of understanding of how the chosen processes operate. The process(es) must be applicable to the identified soil.

(4-7 marks)

(d) Human activity

Any of the following may apply to each of the soil types.
Soils may be upgraded or degraded by human activity:

Upgrading – afforestation, wind breaks, rotation systems, planting of legumes, marling, mulching, liming; drainage, contour ploughing, terracing.

Degrading – reduction or removal of vegetation cover leading to soil erosion, soil compaction by ploughing, heavy vehicles, footpaths, overgrazing, acid rain, over fertilization.

Level 1 – a simplistic list of human activities on soils; or a discussion of one human activity and its influence on the specified soil.

(0-3 marks)

Level 2 – a discussion of more than one way in which human activity has influenced/changed the specified soil.

(4-8 marks)

Total for Question 2 = 25 marks

Question 3**Notes for answers**

We may well get a wide variety of conflicts. Some are documented in texts, whereas others will be the outcome of a local investigation, possibly involving fieldwork. The following serves as an example of the type of answer we should expect.

The Conflict. The Western by-pass of Newbury – a conflict over the use of land.

The Proposal. To build a new bypass to the west of Newbury to ease North/South moving traffic through the town along the A34 (which also forms part of the Euroroute EO5).

The Participants

The local Council of Newbury.

The local residents of Newbury.

The farmers of the area to the west of Newbury.

The road hauliers who wish to travel through Newbury from the North/M4 to Southampton.

The Department of Transport, and Highways Agency.

The Friends of the Earth.

The “The Third Battle of Newbury” group.

The Newbury bypass Supporters group.

Attitudes to the Issue

For example:

- The “Third Battle of Newbury” group were against as the road would cut through several Sites of Special Scientific Interest, would destroy archaeological sites, would damage the site of the 1st Battle of Newbury (1643), and would increase the risk of flooding by bridging structures which would constrict the flow of rivers.
- Newbury Council were for the route of the bypass as it would reduce traffic through the centre of Newbury by 36%, reducing goods vehicles by 88%, only three houses along its 9.5 mile length would have to be demolished, and public transport policies would have a greater chance of success.

The Problem

Most of the A34 consists of dual carriageway, except for the section through and to the south of Newbury. Here there are 4 roundabouts, which have to deal with 50,000 vehicles a day, 15% of which are heavy goods vehicles. Traffic congestion was very severe for large parts of the day, and in the summer often through the night as tourist traffic adds to the volume. Traffic also travels to and from the M4 which lies 3 miles to the north of the town, so there are links to South Wales.

The Processes used to Resolve the Problem

Planning processes were an attempt to provide a means by which planners could:

- Listen to the local community, and to objectors to the proposal
- Listen to the organisation responsible for the proposal of change, and the reasons for it
- Have overall development control in the context of the wider public benefit.

The proposal to build the bypass went to appeal, and a Public Enquiry was held in Newbury under the chairmanship of a judge. Alternative views on the need for a bypass, together with alternative views on the route of the bypass were heard. After a lengthy and costly enquiry, the decision to construct the bypass was upheld, and construction began in 1988. The bypass was opened in 2000.

Winners/Losers

This will depend on the standpoint of each of the participants. Equally, as time as elapsed and as the scheme has now gone ahead, some participants may well have changed their views. Many objectors have moved on to the next environmental conflict, whereas supporters are now enjoying the success, or otherwise, of their successful campaign.

Total Question 3 = 25 marks

Mark Scheme

G	Level 1 0 - 6	Level 2 7 - 12	Level 3 13 - 17	Level 4 18 - 20
	Brief statements of attitudes either for or against the issue. Statements tend to be generalised.	Attitudes clearly attributed to identified participants in the conflict	Some recognition of variation in the basis of attitudes (e.g. over time) within groups who may lose or benefit from conflict.	
	Simple outline of the processes and procedures which operate to resolve the conflict.	Detailed description of the processes operating to resolve the conflict.	Analysis of the various processes that may operate to resolve the conflict. Some statement of success.	
		Simple statements of those who benefit and/or those who lose.	Detailed discussion of the beneficiaries or otherwise in the conflict.	Overall synthesis of conflict. Some recognition that the perception of winners/losers changes over time and/or space.
S	Level 1 0 - 1	Level 2 2 - 3	Level 3 4 - 5	
	Information is adequately organised, and presented with a reasonably accurate use of English.	Well-organised and presented with an accurate use of English. Limited examples.	Well-organised and presented in a clear and logical manner with a very accurate use of English. Range of examples.	

Total for Question 3 = 25 marks

Question 4

Notes for answers

The **reasons** for the growth of TNCs:

- TNCs are able to control or co-ordinate economic activities in different countries and can develop intra-firm trade within and between units of the same corporation in two countries. In this way the TNC has control over terms of trade and can reduce the effects of quota restrictions on the movement of goods.
- TNCs have the ability to take advantage of spatial differences in factors of production and government policies at the global scale. They can exploit differences in the availability of capital, labour costs and land and building costs; they can take advantage of cheaper labour in less developed economies. TNCs can also take advantage of different government policies; tax levels, subsidies/grants, environmental controls (less strict in some countries) and can get round trade barriers by locating in the 'market' economy.
- TNCs have geographical flexibility and can shift resources and production between locations at the global scale to maximise profits.

TNCs may have a variety of **impacts on a host country in MEDC and/or LEDC**:

Favourable:

- They provide employment and thereby raise living standards
- They improve the level of skills and expertise within a country
- They cause foreign currency to be brought into a country, improving the balance of payments
- They cause a multiplier effect, increasing economic activity
- They encourage a transfer of technology into the country

Unfavourable

- Many of the jobs are of low skill
- Managerial positions tend to be brought in rather than developed locally
- Most of profits are sent back to home country
- Corners are often cut in terms of health and safety
- They exert political muscle
- Globalisation of decision making sometimes leads to short term investment, and the TNC may pull out at short notice.

Also, there are **impacts within the country of origin**:

- The development of managerial and research skills
- There will be a general rise in income levels – the whole nation will benefit from overseas investments; greater desire to invest in overseas operations
- Wider share ownership – individuals, and corporate groupings more willing to become involved in foreign investments.

NICs are the countries which have seen the most rapid economic growth in recent years. Originally, they attracted manufacturing industry due to their low labour costs, expanding domestic markets, available raw materials, reduced import and export tariffs, and weaker planning legislation. They began to dominate manufacturing in electrical goods, textiles and clothing, shipbuilding, and increasingly have moved into car assembly. Many of the industries were of a low skill basis, with low technology but high labour input.

In more recent years, the NICs have developed into countries of origin of TNCs, and have invested in both MEDCs and in other LEDCs. Examples of such companies include the Korean firms Samsung, and Daewoo. This is due to increased profits from inward investment by TNCs from MEDCs over the last 30 years. To remain profitable they have been forced to invest in areas of cheaper labour costs than themselves (Malaysia produces 10% of the world's TVs), to gain near access to protected markets (e.g. Daewoo assembling cars in Romania), and to access virgin markets (S. America).

NICs/TNCs have also become involved in service industries – e.g. call centre work in India. Candidates may also refer to the economic and financial problems that occurred in recent years in the Far East, with their knock-on effects elsewhere in the world.

Mark Scheme

G	Level I 0 - 6	Level II 7 - 12	Level III 13 - 17	Level IV 18 - 20
	Simple statements of reasons e.g. cheaper labour	More detailed reasoning, with some depth to one reason e.g. use of case studies.	Development of more than one set of reasons. Examples have a degree of elaboration.	
	Simple statements of impacts on host/origin countries or globally.	More detailed statements for one of social or economic impacts. Some use of case study material.	Well developed statements for both social and economic impacts, with good use being made of case studies for both.	
		Simple statements of relative importance.	Detailed statements of relative importance with some recognition of the importance of the role of one NIC e.g. Taiwan.	Recognition of complexity of the issue. Recognition of the changing importance of NICs over time.
S	Level I 0 - 1	Level II 2 - 3	Level III 4 - 5	
	Information is adequately organised, and presented with a reasonably accurate use of English.	Well-organised and presented with an accurate use of English. Limited examples.	Well-organised and presented in a clear and logical manner with a very accurate use of English. Range of examples.	

Total for Question 4 = 25 marks