

General Certificate of Secondary Education

Geography 3031 *Specification A (Full Course)*

3031/1H Higher Tier

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 GUIDANCE FOR GCSE GEOGRAPHY ASSISTANT EXAMINERS

Quality of Written Communication

Where candidates are required to produce extended written material in English, they will be assessed on the quality of written communication.

Candidates will be required to:

- present relevant information in a form and style that suits its purpose;
- ensure that text is legible and that spelling, punctuation and grammar are accurate;
- use specialist vocabulary where appropriate.

Levels Marking - General Criteria

Where answers are assessed using a level of response marking system the following general criteria should be used.

Level 1: Basic

Knowledge of basic information
Simple understanding
Little organization; few links; little or no detail; uses a limited range of specialist terms
Reasonable accuracy in the use of spelling, punctuation and grammar
Text is legible.

Level 2: Clear

Knowledge of accurate information
Clear understanding
Organised answers, with some linkages; occasional detail/exemplar; uses a good range of specialist terms where appropriate
Considerable accuracy in spelling, punctuation and grammar.
Text is legible.

Level 3: Detailed

Knowledge of accurate information appropriately contextualised and/or at correct scale
Detailed understanding, supported by relevant evidence and exemplars
Well organized, demonstrating detailed linkages and the inter-relationships between factors
Clear and fluent expression of ideas in a logical form; uses a wide range of specialist terms where appropriate
Accurate use of spelling, punctuation and grammar
Text is legible
Level 3 does not always equate to full marks, a perfect answer is not usually expected, even for full marks.

Annotation of Scripts

- One tick equals one mark, except where answers are levels marked (where no ticks should be used). Each tick should be positioned in the part of the answer which is thought to be credit worthy.
- Where an answer is levels marked the examiner should provide evidence of the level achieved by means of annotating 'L1', 'L2' or 'L3' in the left hand margin.
- The consequent mark within this level should appear in the right-hand margin.
- Ticks must **not** be used where an answer is levels marked.
- Examiners should add their own brief justification for the mark awarded e.g. *Just L3, detail and balance here.*
- Where an answer fails to achieve Level 1, zero marks should be given.

General Advice

Marks for each sub-section should be added in the right-hand margin next to the maximum mark available which is shown in brackets. All marks should then be totaled in the 'egg' at the end of each question in the right-hand margin. The totals should then be transferred to the boxes on the front cover of the question paper. These should be totaled. The grand total should be added to the top right-hand corner of the front cover. No half marks should be used.

It is important to recognize that many of the answers shown within this mark 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 creditworthy. The degree of acceptability is clarified through the Standardization Meeting and subsequently by telephone with the Team Leader as necessary.

Diagrams are legitimate responses to many questions and should be credited as appropriate. However, contents which duplicate written material or vice versa should not be credited.

Quality of Written Communication (QWC) is part of the award of marks in levels marked answers only. In levels marked answers the quality of the geography is assessed and a level and mark awarded according to the geography. As is sometimes the case, the geography may be sound at a particular level but the examiner may not be sure as to whether there is quite enough to raise the mark within that level. In this case the examiner should consider the QWC of the answer. QWC that fulfils the criteria for the level should lead to the rise in the mark but where the QWC does not fulfil the criteria, the answer should remain at the mark first thought appropriate. In cases where QWC has been used in the award of marks, the examiner should indicate this with QWC and arrows that indicate either an upward or downward trend according to its impact on the final award of the mark.

SECTION A

Question 1

- (a) Telephone. **1 mark**
- (b) WSW or South west. 225°-250° **1 mark**
- (c) Level marking.

Level 1 (1-2 marks)

Basic statements.

One or two brief points. Separate settlements with no pattern identified e.g.

Ross-on-Wye is the largest.

Maximum 1 if answer only refers to Ross-on-Wye

Level 2 (3-4 marks)

Clear statements.

Achieves greater coverage with some mention of pattern, e.g. Ross-on-Wye

is the largest settlement to the south-east of the extract. Most other

settlements are small. Scattered. Avoids steeper slopes.

Level 3 (5-6 marks)

Detailed statements.

Sound coverage, makes links, clear element of pattern and includes some

place names/grid references etc. Other settlements tend to be small and are

sited on the lower valley sides, e.g. Glewstone Court, Benhall. Settlement

avoids the flood plain of the river and is dispersed on the higher land.

Danger Area limits SE expansion.

6 marks

- (d) Level marking.

Level 1 (1-2 marks)

Basic statements.

e.g. 5624 small village, campsite, church, farm etc. 6127 farm, small pond,

main road, well. Max 1 if one square is incorrect.

Level 2 (3-4 marks)

Clear statements.

Explicit comparisons made for example in square 5624 there is a small

village with a pub and also some farms whereas in 6127 there is only one

farm, Park Farm, and other small buildings e.g. Park cottages.

4 marks

Total

12 marks

Question 2

- (a) Correct outline (2 marks). Label/Added to key (1 mark). Not shaded max.
1. Extend n. of A44(T), s. of grid line 23, w close to meander, e near to A40(T). **3 marks**
- (b) Avoids flooding, avoids steepest land, close to bridging point, water supply, local resources, route focus etc. Defensive site. Fertile soils. Transportation. Detail as in e.g. given = 2 marks i.e. dp
Brief point = 1 mark. Max for simple points = 3 marks. **4 marks**
- Total** **7 marks**

Question 3

- (a) X = Wye Valley Walk. National Trail. Long Distance Route. Recreational Route. Footpath. Dismantled Railway. **1 mark**
- (b) H = Trig point. **1 mark**
- (c) Level marking.

Level 1 (1-2 marks)

Basic statements.

Simple statements with little sequence e.g. the land is flat near the river. The land slopes upwards to the east. Low lying, undulating.

Level 2 (3-4 marks)

Clear statements.

Clearer statements with more of a sequence working from one side of the section to another, e.g. to the west the land starts at 84 metres and slopes down to 30 metres where it is flat on the valley floor. To the east it slopes up again to over 84 metre then drops to 76m. Credit where different gradients recognised.

Total **6 marks**

SECTION B:

Question 4 Tectonics

- (a) (i) Epicentre off the coast of Sumatra, measured 9.3 on Richter scale, 2nd strongest, created tsunami. Submarine quake. Plate boundary. Shockwaves travel 2,500km. **2 marks**
- (ii) Level marking.

Level 1 (1-2 marks)

Basic statements.

Sumatra is close to the earthquake epicentre. Waves very large.

Earthquake large. LEDC issues, e.g. no warning system, poor buildings.

Level 2 (3-4 marks)

Clear statements.

May link information, give direct contrasts or go beyond the resource – the waves would be much larger in Sumatra because it is closer to the epicentre, Sumatra may have a higher density of population at the coast, there may be no warning systems in Sumatra. Sumatra is closer to the epicentre while other countries are much further away.

4 marks

- (b) 3 × 1 or developed points.
Farming in fertile soils/growing lemons, tomatoes, etc.
Tourism – trips to the volcano.
Climate – cooler than in the lowlands.
Geothermal energy. Minerals. **3 marks**

- (c) Level marking.

Level 1 (1-2 marks)

Basic statements.

Simple points lacking completeness or clarity, e.g. lava erupts and builds up.

Level 2 (3-4 marks)

Clear statements.

Greater clarity in sequence and process, e.g. plates move and magma moves along a fault to the surface, repeated eruptions build up layers of lava to form a volcano.

Level 3 (5-6 marks)

Detailed statements.

Likely to be clear responses to one type, e.g. Composite cone at destructive boundary. Sequence and processes in detail with reference to subduction zone, convection currents, repeated eruptions, layer of ash and lava, etc.

6 marks

Total

15 marks

Question 5 Rocks and Landscape

- (a) (i) Correct labelling. Limestone Pavement. Clints. Grykes. Stalagmites. Stalactites. Column/Pillar. Scree. Bedding Plane. Only accept underground stream, spring/emergent stream if drawn on. **2 marks**

- (ii) Level marking

Level 1 (1-2 marks)

Basic statements.

The rock is dissolved, water widens cracks.

Level 2 (3-4 marks)

Clear statements.

More idea of sequence or process. Limestone contains joints. Rainfall, a weak acid, dissolves the rock along the joints to form the pothole.

Level 3 (5-6 marks)

Detailed statements.

Sequence and/or process with good use of vocabulary – detailed outline of solution process, may mention role of glacial meltwater or vegetation.

6 marks

- (b) (i) Scree/clitter, rock outcrop, ht 369m, rounded summit, slopes – 270m some steep slopes, accept reference to drainage **3 marks**

- (ii) Level marking.

Level 1 (1-2 marks)

Basic statements.

List-like, e.g. woodland, reservoirs, quarry, grazing, national park, i.e. description only.

Level 2 (3-4 marks)

Clear statements.

Links or gives examples etc. Large areas are in a National Park, e.g. Sheep's Tor because of its uniqueness. The wide valleys and impermeable rock make it easy to build reservoirs as at Burrator. Accept references to dispersed/small settlements, Forestry on low-value/infertile land, Tin-Mining, etc. At Level 2 comments should make it clear why it is typical of granite.

4 marks

Total

15 marks

Question 6 Rivers

- (a) (i) Correct labelling 3 × 1 – meander, river cliffs, slip-off slope, flood plain, tributary, sloping valley sides (accept bluffs, eyots). Confluence. Reserve 1 mark for valley. **3 marks**
- (ii) Level marking.

Level 1 (1-2 marks)

Basic statements.

Flood plains are deposited and formed by meanders.

Level 2 (3-4 marks)

Clear statements.

E.g. the river meanders and makes the flood plain wider. When the river floods the silt builds up on the flood plain.

Level 3 (5-6 marks)

Detailed statements.

Best answers will integrate formation and migration of meanders with the formation of a floodplain.

Detailed sequence and process of how the enlargement of the meander wears away the valley floor to under the valley, how the meanders migrate downstream widening the flood plain, river deposits on slip off slopes and in flood builds up the flood plain.

Features not shown, e.g. waterfall, max – Level 1.

6 marks

- (b) (i) Level marking.

Level 1 (1-2 marks)

Basic statements.

Land next to river is flooded, hotels, public house, castle flooded.

Level 2 (3-4 marks)

Clear statements.

Better use of terminology, recognises physical and human effects and/or differences between normal and severe flooding, e.g. the flood plain is flooded under normal floods, this also affects the bridges and a public house and a museum. Severe floods affect more properties including hotels, post office, the works..

4 marks

- (ii) Building levees or embankments, using sandbanks, dams upstream, planting trees, etc. **2 marks**
Needs to be explained for 2 marks

Total 15 marks

Question 7 Glaciation

- (a) (i) Possible labels – corrie, tributary glacier / valley, trough / U-shaped valley, hanging valley, arêtes, horn, pyramidal peak, terminal or recessional moraine, tarn, steep backwall, lip, waterfall, bench/alp, truncated spur, rock bar, etc. **4 marks**
- (ii) Level marking.

Level 1 (1-2 marks)

Basic statements.

E.g. the ice eroded the land hollowing it out to form a hollow. The hollow filled with meltwater.

Level 2 (3-4 marks)

Clear statements.

Reference to sequence and process, e.g. the glacier erodes by plucking and abrasion the softer rocks leaving a hollow. This fills with rainwater and meltwater when the ice melts.

Level 3 (5-6 marks)

Detailed statements.

Detailed reference to sequence and process, e.g. explains processes of abrasion and plucking or deposition, sequence correct and adds finer details, e.g. role of moraine deposition, rockbasins and rock bars etc.

6 marks

- (b) (i) Boat-owners will no longer buy petrol from him – income will go down. **1 mark**
- (ii) Level marking.

Level 1 (1-2 marks)

Basic statements.

List-like – less noise, less water pollution, less busy, safer.

Level 2 (3-4 marks)

Clear statements.

Points linked e.g. sailors will not have to put up with noisy powerboats that cause waves on the water; walkers will enjoy more peace and quiet around the lake. Can refer to conservationists, bird-watchers, etc.

4 marks

Total

15 marks

Question 8 Coasts

- (a) (i) Possible labels – headland/cliff, cave, wave cut notch, bedding planes/joints, slumping, arch, bay, (one specific) stump. **3 marks**

- (ii) Level marking.

Level 1 (1-2 marks)

Basic statements.

Brief points – the cliff is eroded by waves, the cliff collapses leaving platform.

Level 2 (3-4 marks)

Clear statements.

Better effort at sequence, some mention of process – the cliff is eroded by hydraulic power, it collapses and retreats leaving behind the WCP.

Level 3 (5-6 marks)

Detailed statements.

Thorough on sequence, integration of process, use of terminology – cliffs are attacked by hydraulic power and corrosion. The great power of the waves and the load thrown against the cliff create a wave cut notch. Eventually the cliff collapses under gravity. The sea removes the debris and a wave cut platform is created.

6 marks

- (b) Gabions (1) metal cages with rocks stacked in a step-like manner. Posts with fencing material on top of gabions. Vegetation (linked to dunes). **2 marks**

- (c) Level marking.

Level 1 (1-2 marks)

Basic statements.

Stops the waves, traps sand, stops erosion.

Level 2 (3-4 marks)

Clear statements.

Link between technique and how it works, the gabions absorb the power of the waves reducing erosion, the fences trap sand helping to build up the beach.

4 marks

Total 15 marks

Question 9 Weather and Climate

- (a) (i) Possible labels – centre of low pressure, dense patch of cloud, thick cloud, shower clouds. Scattered clouds, warm sector, anticlockwise movement, clear sky, swirl (of cloud).
3 x 1

3 marks

- (ii) Level marking.

Level 1 (1-2 marks)

Simple statements.

Little reference to sequence/likely to describe or explain, e.g. it rains when the fronts pass, it gets warmer in the middle.

Level 2 (3-4 marks)

Clear statements.

More idea of sequence and weather, clear statements but likely to be incomplete, may be unbalanced, e.g. as the warm front passes there is a long period of steady rain, followed by the cold front with heavy rain.

Level 3 (5-6 marks)

Detailed statements.

Detailed coverage of both description and explanation, e.g. begins with approach of cirrus cloud, cloud base gradually lowers and thickens generating a long period of light rain ahead of the warm front. As the warm front passes temperatures rise and the sky clears due to the presence of the warm sector. As the cold front approaches the cold air undercuts the warm air causing rapid uplift, towering cumulus clouds and a short period of heavy rain due to the steepness of the front

6 marks

- (b) (i) Between tropics, warm oceans, formed over the sea.
(ii) Level marking.

2 marks

Level 1 (1-2 marks)

Simple statements.

People killed, floods, collapsing buildings, homeless, buildings washed away.

Level 2 (3-4 marks)

Clear statements.

Effect described or clear link to an example, e.g. Hurricane Mitch brought heavy rain that washed bridges away, up to 20 000 people were killed, 1500 were killed by a mudflow.

4 marks

Total

15 marks

Question 10 Ecosystems

- (a) (i) Point mark - use ticks– 1 mark if one sided, 2 marks for a comparison,
e.g. TRF are close to the equator (1)
TRF are close to the equator whereas CF are north of the Tropic of Cancer
(2 marks)
TRF are found in S America, Africa and Indo Malaya, whereas CW are in
Northern N America, Europe and Asia. **4 marks**

- (ii) Level marking.

Level 1 (1-2 marks)

Basic statements.

It has needles, thick bark, sloping branches, etc.

Level 2 (3-4 marks)

Clear statements.

Clear on physical conditions and/or begins to link vegetation, e.g. the trees can survive up to 6 months of very cold temperatures, the trees can survive the lack of plant foods in the soil. The needles reduce transpiration, the flexible branches shed snow easily.

Level 3 (5-6 marks)

Detailed statements.

Detail comes through actual climatic data, soil information or through the adaptations of the vegetation, e.g. temperatures are below freezing for 6 months and rainfall is less than 500mm – the ground is snow-covered and wet most of the year. Conifers can survive these conditions with shallow roots and bendy branches.

6 marks

- (b) (i) Removal of trees. **1 mark**
- (ii) Level marking.

Level 1 (1-2 marks)

Basic statements.

Locals lose land, get jobs.

Level 2 (3-4 marks)

Clear statements.

Local people lose their land so their food supply is lost, soil erosion makes soil infertile so locals can't grow crops, in some areas the locals have been forced to live in reservations, people get jobs e.g. in mining and logging.

4 marks

Total 15 marks