

# Mark Scheme (Results) Summer 2010

O Level

## O Level Geography (7209) Paper 1

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Publications Code

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## General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

Question Number	Answer	Mark
1(a)(ii)	<p>1 mark for each correct answer (3 x 1).</p> <ul style="list-style-type: none"> <li>• A = time-lag (or equivalent) lag - time (1);</li> <li>• B = peak discharge (or equivalent) peak flow (1);</li> <li>• C = falling limb (or equivalent) recession limb (1);</li> </ul>	(3)

Question Number	Answer	Mark
1(a)(iii)	<p>Maximum 2 marks for full accurate definition.</p> <p>Credit valid understanding</p> <ul style="list-style-type: none"> <li>• e.g. normal flow ...with 1 mark.</li> </ul> <p>Reserve 2 marks for full accurate definition</p> <ul style="list-style-type: none"> <li>• e.g. that part of discharge from groundwater flow (through rock) and throughflow (through soil)).</li> </ul>	(2)

Question Number	Answer	Mark
1(a)(iv)	<p>1 mark for each correct point. Maximum 4 marks.</p> <p>Maximum of 2 if comments restricted to one hydrograph (e.g. sudden peak on 1).</p> <p>Maximum of 3 if comments purely observational e.g. higher peak; shorter event ...</p> <p>Reserve 1 mark for technical terms re shape e.g. flashy hydrograph (1) ..</p>	(4)

• Question Number	•	
• 1(a)(v)	•	
• Level	• Mark	• Descriptor
• Level 1	• 1-2	• expect either recognition only e.g. 1 = urban or valid ideas loosely stated e.g. rapid run-off/ less infiltration; different environments. •
• Level 2	• 3-4	• process re hydrograph 1 or 2 e.g. impermeable urban surfaces (concrete & tarmac) •
• Level 3	• 5-6	• expect process re <u>both</u> hydrographs e.g. urban versus woodland •

Question Number		
1(b)		
Level	Mark	Descriptor
Level 1	1-3	expect short-list of valid actions e.g. flood walls; dams
Level 2	4-6	expect either long list of valid actions (max of 5 marks) or outlines of a few schemes or description of one named scheme. Expect naming; description; outline how works.
Level 3	7-9	expect process i.e. how flood reduced. Response in case-study style detail or of at least two named schemes. Explained focus on how works to reduce flood risk.

Question Number	Answer	Mark
2(a)(ii)	<p>2x2 marks. Maximum 4 marks. Evidence to relate to earthquakes.</p> <ul style="list-style-type: none"> <li>• Identification of evidence = 2 marks i.e. epicentre (1); Richter Scale/7.6 magnitude (1)</li> <li>• Explanation = 2 x 1 (e.g. definition of epicentre (1) ...)</li> </ul>	(4)

Question Number	Answer	Mark
2(a)(iii)	<p>2-3 marks available for description of recipient need</p> <ul style="list-style-type: none"> <li>• e.g. use of Figure 2 data re damage. Points marking (2-3x1)</li> </ul> <p>2-3 marks available for reference to donor attitude /means to pay</p> <ul style="list-style-type: none"> <li>• e.g. MEDC/high income(1); compassion and responsibility (1); aid defined (1)</li> </ul>	(5)

Question Number	Answer	Mark
2(b)(i)	<p>1 mark per aspect of term. Maximum 2 marks.</p> <p>Award 1 mark for defining plate/plate margin, and 1 mark for clarifying destructive i.e. collision &amp; sinking</p>	(2)

Question Number		
2(b)(ii)		
Level	Mark	Descriptor
Level 1	1-2	expect basic ideas of pressure build-up or vibration earthquake. Responses re other types of margin. Acceptable within this context. Accept risks to people & proximity; volcanic activity
Level 2	3-4	expect outline process of sinking-melting-release e.g. pressure; friction; unlocking; collision

Question Number	Answer	Mark
2(c)	<p>Maximum 9 marks with (4/5+5/4 per section).</p> <p>Allocate 4-5 marks per section as follows:</p> <ul style="list-style-type: none"> <li>• max of 2 marks for identifying preparations/reactions e.g. drills; quake-proof buildings; evacuation.</li> <li>• max of 3 if differences highlighted e.g. drills versus no drills ...</li> </ul> <p>4-5 mark answers need description of difference and place examples (esp. for 5 marks).</p>	(9)

Question Number	Answer	Mark
3(a)(ii)	<p>1 mark per valid point (3x1). Maximum 3 marks.</p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• low coast (1);</li> <li>• highest in central S. (1);</li> <li>• N. lowland (1)</li> </ul> <p>Though second mark can be for illustrating point with map data e.g. over 1000m in southern highlands.</p>	(3)

Question Number	Answer	Mark
3(a)(iii)	<p>3 + 3 marks. Maximum 6 marks.</p> <p>1. 3 marks available for relief-rainfall link of which up to 2 marks can be for identification</p> <ul style="list-style-type: none"> <li>• e.g. central hills wet (1);</li> <li>• drier on lower ground (1).</li> </ul> <p>Reserve 1 mark for process</p> <ul style="list-style-type: none"> <li>• e.g. rainshadow on east coast; mountains block rain from S.W.</li> </ul> <p>2. 3 marks available with up to 2 marks for identifying pattern</p> <ul style="list-style-type: none"> <li>• e.g. heavy rain from south-west(1)</li> </ul> <p>Reserve 1 mark for explanation</p> <ul style="list-style-type: none"> <li>• e.g. south-east monsoon warm and maritime air</li> </ul>	(6)

• Question • Number	• Answer	• Mark
• 3(b)	<ul style="list-style-type: none"> <li>• 3 x 2 marks. Maximum 6 marks.</li> <li>•</li> <li>• Award 1 mark to each valid purpose</li> <li>• e.g.</li> <li>• HEP project (1);</li> <li>• irrigation (1);</li> <li>• flood control (1)</li> <li>•</li> <li>• 2<sup>nd</sup> marks available for development (accept generic)</li> <li>• e.g. additional crop yields from irrigating</li> <li>• Focus on purpose i.e. benefit.</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> </ul> <p>(6)</p>



Question Number		
3(c)		
Level	Mark	Descriptor
Level 1	1-3	expect stated good only or bad only effects OR one good effect stated (e.g. economic development) and one bad effect stated (e.g. village relocation).
Level 2	4-6	expect stated good and bad effects OR good effects only or bad effects only described (perhaps based on information in key i.e. water supply; electricity).
Level 3	7-9	expect both good and bad effects explained. Expect examples and scheme-specific comments and reference to economic, social and environmental effects.

Question Number	Answer	Mark
4(a)(i)	1 mark for correct answer.  Credit accurate definition <ul style="list-style-type: none"> <li>e.g. rocky level (erosion) surface (1)</li> </ul>	(1)

Question Number	Answer	Mark
4(a)(ii)	Allocate 2 x 1 marks to appropriate labelling of changes i.e. <ul style="list-style-type: none"> <li>notch/cave (1);</li> <li>eroded debris (1).</li> </ul> Remaining 1 mark for explanatory comments e.g. <ul style="list-style-type: none"> <li>base of cliff erosion (1);</li> <li>debris washed seaward (1).</li> </ul>	(3)

Question Number	Answer	Mark
4(a)(iii)	Allocate 1-3 marks for drawing and 1-2 marks for labelling.  Diagram to show unstable cliff collapsing and retreating with wider wave-cut platform for max.	(4)

Question Number	Answer	Mark
4(a)(v)	1 mark for each correct point. Maximum 3 marks.  Point mark the explanation e.g. <ul style="list-style-type: none"> <li>saturates (1);</li> <li>lubricates/slippage (1);</li> <li>force of wind (1);</li> <li>attacks cliff face and top (1);</li> <li>destabilises (1)</li> </ul>	(3)

Question Number	Answer	Mark
4(b)(i)	1 mark for each correct answer (2x1). Maximum 2 marks.  Credit all valid answers e.g. 1. sand replenishment; saltmarsh restoration 2. sea wall; breakwater	(2)

• Question • Number	• Answer	• Mark
• 4(b)(ii)	<ul style="list-style-type: none"> <li>• 2 marks for correct reason. Maximum 2 marks)</li> <li>•</li> <li>• Award 1 mark for valid statement e.g. cheaper; more sustainable ... with 2<sup>nd</sup> mark if developed into full explanatory reason.</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>• (2)</li> </ul>

Question Number		
4(c)		
Level	Mark	Descriptor
Level 1	1-3	expect either a simple statement about cause e.g. global warming ... and about its impact e.g. submergence OR one aspect of question only addressed in outline terms
Level 2	4-6	expect either a strong response to one aspect or both aspects covered in outline terms
Level 3	7-9	expect a balanced response offering causation as a linked process (e.g. more seawater from global warming and thermal expansion) and a number of coastal impacts e.g. land loss; resettlement; costs of protection ...

Question Number		
5(a)(v)		
Level	Mark	Descriptor
Level 1	1-2	expect simple and partial account e.g. condensation; rain clouds.
Level 2	3-4	expect either cloud or rain formation to be clear and accurate e.g. rising-cooling-condensation.
Level 3	5-6	expect why some clouds rain to be outlined e.g. saturation; water droplets. Expect full sequence.

Question Number	Answer	Mark
5(b)	<p>1 mark for each correct point. Maximum 4 marks.</p> <p>Look to 4x1 point mark whether diagram, text or both:</p> <ul style="list-style-type: none"> <li>• low pressure centre(1);</li> <li>• warm sector(1);</li> <li>• cold air(1);</li> <li>• front(s)(1).</li> </ul>	(4)

Question Number		
5(c)		
Level	Mark	Descriptor
Level 1	1-3	expect statements of seasonal difference e.g. warm, sunny summers; cold, foggy winters.
Level 2	4-6	expect basic concept of high pressure, sinking air and clear skies. Outline explanation evident. Limited range of weather elements. Reasonable description of differing weather(max 5)
Level 3	7-9	expect implications of clear skies developed i.e. heat loss in winter therefore ..... For max. marks expect both winter and summer implications addressed in explanatory fashion. Expect Range of weather elements.

• Question • Number	• Answer	• Mark
• 6(a)	<ul style="list-style-type: none"> <li>• 2+2 marks. Maximum 4 marks.</li> <li>•</li> <li>• Mark each of 1. and 2. out of 2 marks. Accept any valid difference/similarity e.g.               <ol style="list-style-type: none"> <li>1. B wetter (1) ;                   <ul style="list-style-type: none"> <li>• both with summer max. (1)</li> </ul> </li> <li>2. B larger range (1);                   <ul style="list-style-type: none"> <li>• both ranges large (1) accept evidence for 2<sup>nd</sup> work.</li> <li>•</li> </ul> </li> </ol> </li> </ul>	<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>• (4)</li> </ul>

Question Number	Answer	Mark
6(b)(i)	<p>Maximum 2 marks for correct definition.</p> <p>Credit full definition with 2 marks (e.g. soil from surface to base showing horizons ....).</p> <p>Award 1 mark for partial but accurate statements</p>	

		(2)
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Question Number	Answer	Mark
6(b)(iii)	<p>Maximum 5 marks.</p> <p>Allocate 2-3 marks to explanation of each process:</p> <ol style="list-style-type: none"> <li>1. downwashing - credit basic idea of low evapotranspiration (1) ...</li> <li>2. uplift - high evaporation(1)...</li> </ol> <p>with further marks(1-2) for development.</p>	(5)

• Question Number	• Answer	• Mark
• 6(b)(iv)	<ul style="list-style-type: none"> <li>• 2 + 2 marks. Maximum 4 marks.</li> <li>•</li> <li>• Award 1 mark to identifying a valid factor up to maximum of 2 e.g. <ul style="list-style-type: none"> <li>• rock type(1);</li> <li>• farming(1);</li> <li>• vegetation(1)</li> </ul> </li> <li>•</li> <li>• 2<sup>nd</sup> marks available for development into description (perhaps an example)</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> </ul> <p>(4)</p>

Question Number		
6(c)		
Level	Mark	Descriptor
Level 1	1-3	expect components of an ecosystem to be valid and explicit i.e. soils; plants; rocks; weather .... No direct mark for naming.
Level 2	4-6	expect basic links between components to be made, generically at bottom of level (4-5 marks) and ecosystem-specific at top of level (5-6 marks). Candidate needs to be describing.
Level 3	7-9	expect reasonable attempts to explain explicit links within a specific ecosystem e.g. adaptation of pine trees to harsh climate; grass and illuviated soils.

Question Number	Answer	Mark
7(a)(i)	<p>Maximum 2 marks for correct definition.</p> <p>Credit full and accurate definition</p> <ul style="list-style-type: none"> <li>e.g. breakdown .. in situ .. with 2 marks.</li> </ul> <p>Partial but valid statement = 1 mark</p>	(2)

Question Number	Answer	Mark
7(a)(iii)	<p>3 + 3 marks. Maximum 6 marks.</p> <p>Mark each process out of 3 marks. Expect max to show explanation of process e.g.</p> <ul style="list-style-type: none"> <li>B - rainwater .. (1); solution (1); joint widening/block shrinks(1) or credit equally clear and full account. Accept freeze - thaw weathering.</li> <li>A - heating and cooling(1); expansion/contraction(1); peeling off ... (1) or as above.</li> </ul> <p>Consequently, differences implicit and acceptable.</p>	(6)

Question Number	Answer	Mark
7(b)(i)	<p>1 mark for each correct answer. Maximum 2 marks.</p> <p>Credit all valid examples e.g.</p> <ul style="list-style-type: none"> <li>accept limestone; chalk; sandstone</li> </ul>	

	<ul style="list-style-type: none"> <li>2. accept granite (and other igneous rocks)</li> </ul>	(2)
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<ul style="list-style-type: none"> <li>Question Number</li> </ul>	<ul style="list-style-type: none"> <li>Answer</li> </ul>	<ul style="list-style-type: none"> <li>Mark</li> </ul>
<ul style="list-style-type: none"> <li>7(b)(ii)</li> </ul>	<ul style="list-style-type: none"> <li>2 + 2 marks. Maximum 4 marks.</li> <li>•</li> <li>Allocate up to 2 marks to each difference with 1 mark for identifying/stating nature of climate in each weathering area e.g. <ul style="list-style-type: none"> <li>wet climate and chemical weathering(1);</li> <li>drier climate and mechanical weathering(1)</li> </ul> </li> <li>•</li> <li>2<sup>nd</sup> marks for development.</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>(4)</li> </ul>

Question Number		
7(c)		
Level	Mark	Descriptor
Level 1	1-3	expect simple statements of broad field methodology e.g. measured width of beach; counted frequency of waves
Level 2	4-6	expect some detailed reference to nature and methods used re equipment and recording of results
Level 3	7-9	expect details and focus to be on impact of processes on the landform chosen and how fieldwork shows this (e.g. deposition on longshore drift side of groyne).



Question Number	Answer	Mark
8(a)(i)	<p>Maximum 3 marks.</p> <p>Credit each valid point made with 1 mark e.g.</p> <ul style="list-style-type: none"> <li>• equatorial (1);</li> <li>• the 3 named countries(1);</li> <li>• west and central Africa (1);</li> </ul> <p>unnamed areas outside three main clusters e.g.</p> <ul style="list-style-type: none"> <li>• Queensland (1)</li> </ul>	(3)

Question Number	Answer	Mark
8(a)(ii)	<p>Maximum 3 marks.</p> <p>Credit with 1 mark the basic idea of climatically determined evident e.g. TRF</p> <p>With further 1-2 marks for development of idea e.g.</p> <ul style="list-style-type: none"> <li>• hot and wet(1);</li> <li>• rapid growth(1)</li> </ul>	(3)

Question Number	Answer	Mark
8(b)	<p>2 + 2 marks. Maximum 4 marks.</p> <p>1-2 (up to 3 in exceptional circumstances) marks for each of structure and characteristics.</p> <p>Expect: under structure: e.g.</p> <ul style="list-style-type: none"> <li>• layering (1)...</li> <li>• under characteristics e.g. evergreen(1)</li> <li>• biodiversity(1)</li> </ul>	(4)

Question Number	
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8(c)		
Level	Mark	Descriptor
Level 1	1-2	expect description of variation based on statistics given e.g. - in UK; + in Africa
Level 2	3-4	expect outline causes of deforestation (e.g. lumbering; clearance for farming ...) and afforestation OR one of these basic changes answered well
Level 3	5-6	expect either use of these causes to account for spatial variation OR thorough reference to forest conservation strategy (e.g. agroforestry; sustainability; policing ...) and deforestation causes.

Question Number		
8(d)		
Level	Mark	Descriptor
Level 1	1-3	expect an outline of offending human activities with reference to either a non-forest ecosystem or generically. No direct mark for naming. Accept forest ecosystems but need more than causes of deforestation; they need to be linked to degradation.
Level 2	4-6	expect named ecosystem e.g. savanna grasslands and some reference to ecosystem impact of activities e.g. overgrazing .. For forest responses look for general ecosystem break-down e.g. biodiversity loss.
Level 3	7-9	expect ecosystem degradation/destruction to be explicit i.e. how activities have changed ecosystem for worse. For forests expect detailed process of ecosystem collapse.

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