

GCSE

Geography A

Unit A731/01: Contemporary themes in geography (Foundation Tier)

General Certificate of Secondary Education

Mark Scheme for June 2016

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This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which marks were awarded by examiners. It does not indicate the details of the discussions which took place at an examiners' meeting before marking commenced.

All examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the report on the examination.

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Annotations

Annotation	Meaning
✓	Correct response
×	Incorrect response
SEEN	Seen but no credit awarded
L1	Level 1
L2	Level 2
L3	Level 3
BOD	Benefit of the Doubt
^	Omission mark
PLC	Location specific detail
DEV	Development
?	Unclear
IRRL	Irrelevant
LNK	Linked Answer
BP	Blank Page
{	Highlighted Paragraph

Mark scheme

Awarding Spelling, Punctuation and Grammar to scripts with a scribe coversheet

- a. If a script has a **scribe cover sheet** it is vital to check which boxes are ticked and award as per the instructions and grid below:
 - i. Assess the work for SPaG in accordance with the normal marking criteria. The initial assessment must be made as if the candidate had not used a scribe (or word processor) and was eligible for all the SPaG marks.
 - ii. Check the cover sheet to see what has been dictated (or what facilities were disabled on the word processor) and therefore what proportion of marks is available to the candidate.
 - iii. Convert the SPaG mark to reflect the correct proportion using the conversion table given below.

SPaG mark awarded	Mark if candidate eligible for one third (eg grammar only)	Mark if candidate eligible for two thirds (eg grammar and punctuation only)
0	0	0
1	0	1
2	1	1
3	1	2
4	1	3
5	2	3
6	2	4
7	2	5
8	3	5
9	3	6

- b. If a script has a **word processor cover sheet** attached to it the candidate **can** still access SPaG marks (see point a. above) unless the cover sheet states that the checking functionality is enabled, in which case no SPaG marks are available.
- c. If a script has a **word processor cover sheet** <u>AND</u> a scribe cover sheet attached to it, see point a. above.
- d. If the script has a **transcript**, **Oral Language Modifier**, **Sign Language Interpreter or a Practical Assistant cover sheet**, award SPaG as normal.

Ques	stion	Answer/Indicative content	Marks	Guidance
1 (a)		Mountain climates – cold/ freezing/ sub-zero temperatures (), snow () Mountain landscape – steep slopes (), rocky ground (), snow/ice (), rugged (). Desert climates - hot /high temperatures (), arid/no or little rainfall ()/ high pressure ().	3	 Indicate each correct point with a Does not credit "snow/ice" twice in mountain climate and mountain landscape. No credit should be given for ideas about a lack of oxygen/altitude.
(b)		 Indicative content might include: The author describes the desert as silent (*) because it is isolated **** The author describes the distinct colours of the desert (*) which are not found anywhere else ***** The author identifies features such as mirages (*) which only occur when it very hot/ sunny/ lack of water ***** The author shows the area is hot (*) as he uses words such as fiery ********* The author suggests that this is a place that you may never see again (*) as deserts are difficult to visit ***********************************	2	Point mark 1 idea () plus 1 development (). There needs to be reference to the figure for any marks to be awarded. This includes use of words and phrases from the figure.

Question	Answer/Indicative content	Marks	Guidance
(c) (i)	Accept any correctly named and located desert. Candidates will probably name one from the specification –Arabian, Atacama, Australian, Kalahari, Mojave, Sahara, Thar	1	 Indicate each correct point with a Need the name of the desert and for it to be circled. Accept a hot desert not in the specification if accurately named and located. Do not award marks that may circle 2 deserts, for instance the Sahara and the Arabian or the candidate circles two separate deserts.
	Indicative content might include: Deserts lies between 15 and 35 degrees North and South of the Equator/near/on the Tropics (•••) where air is sinking/ area of high pressure ••••••••••••••••••••••••••••••••••••	4	Point mark 1 idea (*) plus development (***).

	Ques	stion	Answer/Indicative content	Marks	Guidance
	(d)		 The correct answer is: A salt pan is a flat area of ground in a desert covered with salts and other minerals (Salt pans are often white (). Salt pans are often white () in colour. The hot climate in the desert quickly evaporates () any rainwater lying on the flat ground, leaving the salts behind. 	3	Indicate each correct point with a ✓.
2	(a)		A – Andes B – Himalayas	2	Indicate each correct point with a ✓. Allow individual named mountains in that range such as Mt Everest/ Machu Picchu.
	(b)		Indicative content might include: Plates move together/ collide/ converge/ destructive plate boundary/ collision boundary (), such as the Indian and Eurasian plate (), because of convection currents (). As there is no subduction () rocks are pushed upwards/ folded () due to the pressure () and appear above sea level (). OR Plates move together/ collide/ converge/ destructive plate boundary/ collision boundary (), such as the Nazca and South American plate (), because of convection currents (). One plate is subducted () which crumpled as it moved upwards to from fold mountains ().	3	Indicate each correct point with a ✓. Mark diagram as text – do not double credit both.

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Question	Answer/Indicative content	Marks	Guidance
(C)	 Level 3 (5–6 marks) Thorough, detailed description of at least two ways in which mountains are used by named groups of people, including at least one with location specific detail. Written work is legible and spelling, punctuation and grammar are accurate. Meaning is communicated very clearly. Level 2 (3–4 marks) Sound description of one or two ways in which mountains are used by people, although specific groups may not be clearly identified. Brief or incorrect location specific detail. Written work is legible and spelling, punctuation and grammar are mostly accurate. Meaning is communicated clearly. Level 1 (1–2 marks) Basic statements about how mountains are used which contain no developed ideas. Lacks any location specific detail. Written work contains mistakes in spelling, punctuation and grammar which sometimes hinder communication. 0 marks No response or no response worthy of credit 	6	The response should be marked holistically. Use ^{DEV} to show where a statement has been developed. Use ^{PLC} to show location specific detail needed for Level 3. Examiners to label the overall level awarded at the end of the response. If the work does not address the question and is given zero marks then annotate the answer with ^{DEEN} . If the quality of written communication criteria is not fully met, then full marks cannot be awarded. Level 3 e.g. Alpine pastures in the <i>Tirol</i> are used by farmers to farm <i>Pinzgauer</i> cattle and sheep on the slopes and grow crops on the flat valley floors. Warmer sunny slopes may also be used to grow vines. Tourists use towns, like <i>Tignes</i> , for sports, especially skiing in the winter months. The local residents run hotels, ski schools, bars and restaurants. In the summer walking, rambling and bird watching are popular activities and mean the local people can get an income all year round. Level 2 e.g. The Alps are popular for tourists who go skiing in the winter. This gives the locals jobs in hotels, restaurants and on the ski slopes. In summer activities such as walking, rambling and bird watching are popular. Level 1 e.g. Mountains are used for skiing holidays which are popular in the winter. Groups may include residents, tourism, farming and energy producers rather than hikers, climbers or mountain bikers.
	Spelling, punctuation and grammar are assessed using the separate marking grid on page 21	3	

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Que	estion	Answer/Indicative content	Marks	Guidance
(d)	(i)	Indicative content might include:	3	Point mark 1 idea (💙).
		Avalanches pose challenges for people because they are a hazard to life/ cause injury if people become trapped		Allow development of an idea.
		(\checkmark) and property may become buried or damaged (\checkmark).		Ensure that the challenge is linked to people and the not the landscape or animals.
		They can disrupt transport by blocking roads (✓),		
		villages cut-off (and electricity/ communications by bringing down power lines/cables (
		People might be unable to get to their work (\checkmark) which may reduce their income (\checkmark).		

	Que	stion	Answer/Indicative content	Marks	Guidance
		(ii)	Indicative content might include: Signs can be placed to tell skiers about the risk of an avalanche occurring (). Weather conditions can be monitored to help predict the likelihood of an avalanche occurring (). Skiers are reminded to make sure they have the correct equipment () and level of expertise needed (). Stay in a large group so that people can go for help (). Smaller groups are less likely to trigger an avalanche (). Stay on marked pathway/ piste (). Stay quiet (). Stay on marked pathway/ piste (). Stay quiet (). Special mountain rescue teams are trained to help out in an avalanche (). Construct avalanche shelters () or avalanche walls (). Warning alarms/ sirens are triggered when an avalanche occurs ().	3	Point mark (). Accept all relevant suggestions and allow a development mark.
3	(a)	(i)	Country X is Haiti (✓). Country Y is China (✓).	2	Point mark (✓).
		(ii)	The Richter scale measures the magnitude/ strength/ power of an earthquake (). Measures the amount of energy released (). The amplitude of the seismic wave (). Measured on a seismometer (). Logarithmic Scale () where 2 is ten times stronger than 1 ().	2	Point mark (). Do not credit – how big the earthquake is, how much damage was done, how severe it was, number of buildings knocked down or a description of how a seismometer works.

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Question	Answer/Indicative content	Marks	Guidance
(iii)	 A larger value on the Richter scale indicates a more powerful earthquake (✓). Use of an accurate example (Haiti = 7) (✓). The two true answers are: More lives were lost in Haiti than Japan (✓). 	2	Point mark (). Max 1 if three boxes are ticked.
	The earthquake in New Zealand had the smallest impact (✓).		No credit can be given if the candidate ticks 4 or more boxes.
(b) (i)	Causes will depend on the earthquake studied e.g. Haiti 2010 Haiti lies on a conservative plate boundary (•••) where the North American Plate meets the Caribbean Plate (•••). This movement is not smooth and friction is created (•••). In 2010 so much pressure built between the plates (•••) that when it was released it caused an earthquake (•••). Japan lies on a destructive plate boundary (•••) where the Pacific Plate is being subducted (•••). This movement is not smooth and friction is created (•••). In 2011 so much pressure (•••) built between the plates that when it was released it caused an earthquake (•••).	3	Point mark (). If the candidate can't name the earthquake they have studied then no credit can be awarded.

Question	Answer/Indicative content	Marks	Guidance
(ii)	Indicative content might include:	4	Point mark (✓).
	Short term effects: effects that are directly linked to the event such as buildings collapsed (), people died (lost) (), people were injured (), water pipes were broken (), being made homeless (), loss of services such as water or electricity (), lack of food (), search and rescue operations () or aftershocks ().		One mark for each clearly identified short or long term effect (2 of each) up to a maximum of 2 marks for each effect. Candidates need to show that they understand short and long term effects and the difference between them.
	Long term effects: impacts that are caused by initial short term effect, such as, the cost of repairing buildings (), financial impact of repairing buildings (), coping with being made homeless (), rebuilding houses (), impact of diseases (), starvation (), loss of livelihood (), family break-up (), emotional trauma () or people moving away from the area ().		No credit for losing your job or no work.

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Question	Answer/Indicative content	Marks	Guidance
(iii)	 Level 3 (5–6 marks) Clear understanding of how the effects of the named earthquake were managed and evaluate how well this was done. There may be some location specific detail in support of the answer. Written work is legible and spelling, punctuation and grammar are accurate. Meaning is very clearly communicated. Level 2 (3–4 marks) Sound understanding of how the effects of the earthquake were managed with some basic statements of how well this was done. Written work is legible and spelling, punctuation and grammar are mostly accurate. Meaning is communicated clearly. Level 1 (1–2 marks) A basic description of the effects of the earthquake with 	6	The response should be marked holistically. Use DEV to show where a statement has been developed. Examiners to label the overall level awarded at the end of the response. If the work does not address the question and is given zero marks then annotate the answer with SEEN. If the quality of written communication criteria are not fully met then full marks cannot be awarded. Level 3: The effects of the earthquake in Japan were managed quite well because people with injuries were being treated and provided with health care. However, not everyone was treated quickly and many people died as the emergency services were stretched and couldn't cope with the demand. Level 2: The effects of the earthquake in Japan were dealt
	some understanding of how the earthquake was managed. Written work contains mistakes in spelling, punctuation and grammar which sometimes hinder communication.		with pretty slowly as there are still some buildings which have not been repaired after the tsunami. Level 1: The building's collapsed and trapped people in the rubble.
	No response or no response worthy of credit		
	Spelling, punctuation and grammar are assessed using the separate marking grid on page 21	3	

	Question		Answer/Indicative content	Marks	Guidance
4	(a)		Globalisation means that the world is becoming more connected.	1	Point mark (🖌).
	(b)	(i)	 Reasons include: Chinese factories are no longer competitive Increase in Chinese production costs Average salaries in Bangladesh are lower than in China/ rise in Chinese wages. Bangladesh has skilled workers Cost of transporting goods from Bangladesh is low Prices can be 10% lower Easy reach of the Chinese border. 	3	 Point mark (The reasons must come from the extract. Do not credit no taxes/ tariffs as this applies to the Bangladeshi importers and not the Chinese firms. Do not double credit low wages in Bangladesh and high wages in China.
		(ii)	Indicative content might include: Some people may be unhappy about buying clothes made in Bangladesh because of the unsafe conditions in which people work (), the low wages they receive (), the pressure not to make mistakes () and the use of child labour (). Factory housing may cause workers to live in harsh conditions (). Consumers may perceive that the goods are of a lower quality/ cheaply made (). Consumers might worry that they are not contributing to their local economy (). Consumers might worry that they are producing carbon dioxide/ creating product miles ().	3	Point mark (). Do not credit unethical/ exploited – why is it unethical/ exploitation?

	Question		Answer/Indicative content		Guidance	
	(c)	(i)	Indicative content might include: Name of product – green beans Green beans and other vegetables for the UK market are grown in Kenya (). Every day 35,000 tonnes of vegetables are transported by air () to the UK (). Mobile phones are made in Shenzhen in China (). They are loaded into containers and transported to the UK () by ship () where they are delivered to electrical stores for the consumer to buy.	3	Point mark (). There is one mark for the location that the product starts in, one mark for the method of transportation and a final mark for the destination. Do not credit the raw materials that are used in the product such as coltan.	
		(ii)	Indicative content might include: As people become more aware of the impact of "food miles" () on products such as green beans from Kenya demand may decrease () locally grown production may increase as people are more concerned about the environmental impacts of food production (). The demand for mobile phones might increase () as the number of apps increases, making them more desirable (). However, it may decrease as most people already have a mobile phone ().	3	Point mark (). Reserve 1 mark for increasing demand/ decreasing demand/ both increase and decrease.	
5	(a)	(i)	Indicative content might include: China has a very large population so needs lots of energy from renewable (). China has a lot of space for renewable sources like wind turbines (). China has a lot of factories that need energy (). It is rich and can afford/ is willing to invest in renewables (). It might not have access to non-renewable sources ().	1	Point mark (✓). Accept any reasonable suggestion.	

Ques	stion	Answer/Indicative content	Marks	Guidance
	(ii)	Geothermal power can only be used where there is tectonic activity/plate movement/hotspots/ rock type (). It is rich and can afford/ is willing to invest in geothermal () because it is expensive ().	1	Point mark (). Any answers that relate to the location of geothermal power need to reference the idea of plate boundaries/ hot rock or ground and not make vague references to being in the right area.
	(iii)	It is cheap er than other types of renewable energy (). Wind turbines can be built offshore () so cause less disruption to inhabitants (). They can generate electricity 24 hours a day (). It might be the only renewable source readily available	1	 Point mark (Accept any reasonable suggestion. Do not accept cheap. Cheaper or cheapest are acceptable. Do not credit statements such as it is easier/ the most sustainable/ the most renewable/ the most reliable.
(b)	(i)	Indicative content might include: The future use of nuclear power is an issue because of the dangers associated with the use of uranium (), the cost of building more nuclear power stations () and the expense of decommissioning old nuclear power plants (). Building a nuclear power station can ruin the landscape ().	3	 Point mark (✓). If the issues explained in the body of the answer do not match their named energy issue then no marks should be awarded. Do not credit the idea that there is a difference of opinion. Do not credit vague statements such as, good for the environment or damage the environment.

Question	Answer/Indicative content	Marks	Guidance
	Level 3 (5–6 marks)Clear suggestions on how the chosen energy issue is currently managed and how this could change in the future. Good supporting detail of the named energy issue. Written work is legible and spelling, punctuation and grammar are accurate. Meaning is very clearly communicated.Level 2 (3–4 marks) Sound suggestions on how the chosen energy issue is managed with a brief suggestion of how this might change in the future. Some supporting detail of the named energy issue. Written work is legible and spelling, punctuation and grammar are mostly accurate. Meaning is communicated clearly.Level 1 (1–2 marks) Basic suggestions about how the energy issue is managed now. Little or no reference to the future and lacks detail specific to the chosen example. Written work contains mistakes in spelling, punctuation and grammar which sometimes hinder communication.0 marks No response or no response worthy of credit	6	The response should be marked holistically. Use very to show where a statement has been developed. Examiners to label the overall level awarded at the end of the response. If the work does not address the question and is given zero marks then annotate the answer with a very difficult of written communication criteria are not fully met then full marks cannot be awarded. Level 3 For example It is very difficult to manage the issue of nuclear power because people do not want to live in view of a nuclear power station due to dangers of contamination and explosions. This can be managed by locating plants as far away from settlements as possible. In the future new nuclear power stations will be built close to existing sites as they have already been accepted in that location. Level 2 For example At the moment fracking is being managed because the government have produced rules that fracking companies have to follow. In the future the rules might change if problems are found.
			Wind farms are built in remote areas or at sea so people don't object.
	Spelling, punctuation and grammar are assessed using the separate marking grid on page 21	3	
(c) (i)	Coal (), oil (), gas (), shale gas (), nuclear (), biomass (), wood ().	1	Point mark (✔). Do not credit fossil fuels.

Qı	uestion	Answer/Indicative content	Marks	Guidance
	(ii)	Indicative content might include:	4	Point mark 1 idea (✓).
		The use of coal as a source of energy is already declining because it is running out (). It is becoming harder () and more expensive () to mine because the coal still in the ground is very deep () or beneath the ocean (). As people become more environmentally aware () they are choosing electricity supplied from "greener" sources ().		Carry error forward from the previous question.
	(iii)	Burning coal may release greenhouse gases (✓). Answer 1: In the future more renewable energy may be needed which may create conflicts, for example between residents and energy companies (✓) when they build	4	Point mark (). Reserve 1 mark for two named groups/ countries who are in conflict with each other.
		wind farms which residents feel spoil the landscape (*). Answer 2: Farmers and conservationists (*) may object to the large scale use of land for solar panels (*) as this destroys habitats (*).		
6 (a	a) (i)	 Birth rate is the number of births per thousand population per year (Birth rate is the percentage of birth in a period of time (). 	1	Point mark (✔).
	(ii)	Natural increase is the birth rate minus the death rate (✓) The difference between birth rate and death rate (✓).	1	Point mark (✓).
(b	o) (i)	29 (V)	1	Point mark (💙).

Que	stion	Answer/Indicative content	Marks	Guidance
	(ii)	38 (🔨)	1	Point mark (🗸).
(c)	(i)	The Demographic Transition Model shows changes in total population and birth and death rate through time (••). In stage 1 the birth and death rates vary (••) with a low total population (••). In stage 2, the death rate is starting to fall (••) but the death rate is still high (••) so the total population starts to rise (••). In stage 3, the birth rate starts to fall (••) and the total population continues to rise (••). In Stage 4, the birth and death rates are low (••) and the total population is increasing slowly (••).	3	Point mark (✓). One mark is available for an overview of the DTM.
	(ii)	 Pyramid A shows Stage1 or 2 (*) because it has a wide base (*) and is triangular in shape (*). This. is because it has a high birth rate (*) and a high death rate (*). Many people are dying at a young age (*). Pyramid B shows Stage 4 (*) because it has a narrow base (*) and most of the bars are relatively even/rectangular in shape (*). This. is because it has a low birth rate (*) and a low death rate (*). More people are living to an older age (*). This shows a stable population (*). 	4	 Point mark (). One mark for the stage number and one mark for the reason. Maximum of two marks for each of the stages. If the candidate identifies the wrong stage then no marks can be awarded. If they do not identify a stage number then a mark can be awarded for a valid reason as they have not contradicted themselves.

Question	Answer/Indicative content	Marks	Guidance
(d)	Level 3 (5–6 marks) Detailed comparison of the differences in population structure between the chosen local place and non-UK place with reasons clearly suggested for each difference. Written work is legible and spelling, punctuation and grammar are accurate. Meaning is communicated very clearly. Level 2 (3–4 marks) Comparison of differences in population structure between the chosen local place and non-UK place. Written work is legible and spelling, punctuation and grammar are mostly accurate. Meaning is communicated clearly. Level 1 (1–2 marks) Basic statements about the population in the chosen local place and non-UK place with no reference to population structure. Written work contains mistakes in spelling, punctuation and grammar which sometimes hinder communication. 0 marks No response or no response worthy of credit.	6	The response should be marked holistically. Use DEV to show where a statement has been developed. Examiners to label the overall level awarded at the end of the response. If the work does not address the question and is given zero marks then annotate the answer with a DEV If the quality of written communication criteria are not fully met then full marks cannot be awarded. For Level 3: In Brighton, my chosen local place there is a larger elderly population compared to my non-UK place, Nairobi, which has a higher proportion of younger people. Many older people move to Brighton when they retire because the climate is milder. Nairobi, however, attracts younger people moving from the countryside in search of work. Level 2: Brighton has more old people whereas Nairobi has more young people. Older, retired people move to Brighton from other parts of the UK. Young people move to Nairobi from the countryside looking for work. Level 1: My place has a lot of elderly people whereas the other city I studied has a lot of young people. Max Level 1 if the non-UK place is inappropriate. The specification states that, "The chosen non-UK place must be a rural or urban environment at a regional scale. Both chosen places, 'local' and 'non-UK', must not be a country."
all the second sec	Spelling, punctuation and grammar are assessed using the separate marking grid on page 21	3	

Spelling, punctuation and grammar (SPaG) assessment grid

High performance 3 marks

Candidates spell, punctuate and use rules of grammar with consistent accuracy and effective control of meaning in the context of the demands of the question. Where required, they use a wide range of specialist terms adeptly and with precision.

Intermediate performance 2 marks

Candidates spell, punctuate and use rules of grammar with considerable accuracy and general control of meaning in the context of the demands of the question. Where required, they use a good range of specialist terms with facility.

Threshold performance 1 mark

Candidates spell, punctuate and use rules of grammar with reasonable accuracy in the context of the demands of the question. Any errors do not hinder meaning in the response. Where required, they use a limited range of specialist terms appropriately.

OCR (Oxford Cambridge and RSA Examinations) 1 Hills Road Cambridge CB1 2EU

OCR Customer Contact Centre

Education and Learning

Telephone: 01223 553998 Facsimile: 01223 552627 Email: <u>general.gualifications@ocr.org.uk</u>

www.ocr.org.uk

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