
GEOGRAPHY**0460/13**

Paper 1

October/November 2018

MARK SCHEME

Maximum Mark: 75

Published

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge International will not enter into discussions about these mark schemes.

Cambridge International is publishing the mark schemes for the October/November 2018 series for most Cambridge IGCSE™, Cambridge International A and AS Level components and some Cambridge O Level components.

Generic Marking Principles

These general marking principles must be applied by all examiners when marking candidate answers. They should be applied alongside the specific content of the mark scheme or generic level descriptors for a question. Each question paper and mark scheme will also comply with these marking principles.

GENERIC MARKING PRINCIPLE 1:

Marks must be awarded in line with:

- the specific content of the mark scheme or the generic level descriptors for the question
- the specific skills defined in the mark scheme or in the generic level descriptors for the question
- the standard of response required by a candidate as exemplified by the standardisation scripts.

GENERIC MARKING PRINCIPLE 2:

Marks awarded are always **whole marks** (not half marks, or other fractions).

GENERIC MARKING PRINCIPLE 3:

Marks must be awarded **positively**:

- marks are awarded for correct/valid answers, as defined in the mark scheme. However, credit is given for valid answers which go beyond the scope of the syllabus and mark scheme, referring to your Team Leader as appropriate
- marks are awarded when candidates clearly demonstrate what they know and can do
- marks are not deducted for errors
- marks are not deducted for omissions
- answers should only be judged on the quality of spelling, punctuation and grammar when these features are specifically assessed by the question as indicated by the mark scheme. The meaning, however, should be unambiguous.

GENERIC MARKING PRINCIPLE 4:

Rules must be applied consistently e.g. in situations where candidates have not followed instructions or in the application of generic level descriptors.

GENERIC MARKING PRINCIPLE 5:

Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).

GENERIC MARKING PRINCIPLE 6:

Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptors in mind.

Levels of response marking is used for section (c) of each question.

Thus it is the quality of the response that determines which level an answer is achieved rather than the quantity of statements contained within it. However, once assigned to a level the mark achieved within that level is determined by the number of points made.

Levels 1 and 2 are distinguished by whether statements are simple (level 1) or developed/elaborated (level 2). A candidate can immediately enter L2 by making developed points without making any L1 statements. In order to achieve L3 a candidate must have already reached the top end of L2 – in addition his/her answer should have a clear example and if the answer is place specific as well (7 marks). Highlight place specific detail.

Where statements are assigned levels by the examiner this should be indicated by the use of L1 and L2 next to the statements. Ticks should **not** be used on answers that are marked using levels of response marking. L1 annotation should be removed once a L2 is awarded for an answer. L3 annotation is not used. There is no need for a summary level at the end of a response.

Summary:

Level 1 (1 to 3 marks):

- 1 simple statement (1 mark)
- 2 simple statements (2 marks)
- 3 simple statements (3 marks)

Level 2 (4 to 6 marks):

- 1 developed statement (4 marks)
- 2 developed statements (5 marks)
- 3 or more developed statements with e.g. (6 marks)

Level 3 (7 marks)

- 3 or more developed statements + named example with at least one piece of place specific detail.

Question	Answer	Marks
1(a)(i)	How closely together people live	1
1(a)(ii)	167 000 divided by 616 (1 mark) = 271/271.1/271.103 (1 mark) 2 @ 1 mark	2
1(a)(iii)	Puerto Rico Puerto Rico Barbados 3 @ 1 mark	3
1(a)(iv)	Ideas such as differences in: Accessibility/airport/port; Resource availability/minerals etc.; Relief; Employment; Soil fertility/good for agriculture Tourism/industry (land use function idea) Migration etc. 4 @ 1 mark	4
1(b)(i)	Ideas such as: Widely spread; Unevenly spread Many in high latitudes/polar areas/Arctic; Around tropics/Tropic of Capricorn/Cancer; Northern North America/North(ern) Asia/Australasia/north Africa/North Europe/Central/Southern South America; NOTE Max 2 marks for any two. Northern hemisphere; 3 @ 1 mark	3
1(b)(ii)	Sparse/don't live in deserts/where too dry/live where plenty of rain; Sparse/don't live where too cold/live in temperate/moderate areas; As they are unable to be able to grow crops; (Cold so) It is difficult to build houses; (Cold so) It is difficult to build transport routes; Suffer from dehydration/heat stroke; Suffer from frostbite ; Diseases such as malaria; 5 @ 1 mark or development	5

Question	Answer	Marks
1(c)	<p>Levels marking</p> <p><u>Level 1</u> (1–3 marks) Statements including limited detail which explain why a country has high natural population growth rates. High BR(L1) Low death rate/increasing life expectancy (L1)</p> <p><u>Level 2</u> (4–6 marks) Uses named example. More developed statements which explain why a country has high natural population growth rates. Allow statements that explain in more detail, also allow development of low death rate or high birth rate (max.1 for each) e.g. High BR due to lack of contraception (L2) Polygamy, so more partners leads to more children (L2)</p> <p>(Note: Max 5 if no named or inappropriate example)</p> <p><u>Level 3</u> (7 marks) Uses named example. Comprehensive and accurate statements including some place specific reference. STATS as place specific, but not L2.</p> <p><u>Content Guide:</u> Answers are likely to refer to ideas such as: high birth rates poor access to contraceptives lack of education about birth control some religions are against contraception little education about adverse impacts of large families dependence on agriculture high IMR traditional attitudes encourage large families many women don't have careers decreasing death rates improving health care setting up care structure for old (or examples) pension schemes being set up etc.</p> <p><u>Place specific reference is likely to consist of:</u> Named parts of the chosen country, Population data etc.</p>	7

Question	Answer	Marks
2(a)(i)	Large amounts of housing, shops and entertainments 1 mark	1
2(a)(ii)	Brazil...South Africa...India...Ethiopia All correct = 2 marks 2 or 3 correct = 1 mark 2 @ 1 mark	2
2(a)(iii)	Ideas such as: Over 75%/most are in (North)America/Europe/Australasia/Oceania/N.Africa/Middle East; Max 2 here Many in temperate areas; Under 25% in Africa/Southern/SE Asia/the tropics/around equator; Max 2 here 3 @ 1 mark	3
2(a)(iv)	Ideas such as: Urbanisation has been occurring for a longer period of time in MEDCs/urbanisation occurred a long time ago in MEDCs/migration from rural to urban areas already taken place; More industry/commerce/business has grown up in MEDCs; Much of agriculture in MEDCs is mechanised; MEDCs mainly industry; LEDCs mainly farming; Note: Do need comparison but do not double credit 4 @ 1 mark	4
2(b)(i)	Ideas such as: Education/schools; Health care/hospitals/clinics; Bright lights/entertainment; Shops/availability of goods; Work; Transport/roads; etc. 3 @ 1 mark	3

Question	Answer	Marks
2(b)(ii)	<p>Ideas such as: Lack of employment; Low pay; Long hours/exploitation; Inadequate/not enough housing/people forced to live in squatter settlements/on the streets; Lack of open space; Poor/unhygienic water supplies; Lack of sanitation; Rapid spread of disease; Cannot afford food/homes/education/medical care; Breathing problems caused by air pollution; Traffic congestion; Noise; Culture clash/racism/discrimination; Friends/family left behind; Lack of electricity/outages/illegal/dangerous; Fire; etc.</p> <p>5 @ 1 mark or development</p>	5

Question	Answer	Marks
2(c)	<p>Levels marking</p> <p><u>Level 1</u> (1–3 marks) Statements including limited detail which describe strategies used to improve living conditions in squatter settlements.</p> <p><u>Level 2</u> (4–6 marks) Uses named example.</p> <p>More developed statements which describe strategies used to improve living conditions in squatter settlements. (Note: Max 5 if no named or inappropriate example)</p> <p><u>Level 3</u> (7 marks) Uses named example.</p> <p>Comprehensive and accurate including some place specific reference.</p> <p><u>Content Guide:</u> Answers should focus on living conditions and are likely to include reference to: Building low cost housing Self-help schemes Site and services schemes Installing infrastructure (roads/electricity/piped water/sanitation) Development of new towns/satellite towns Service provision such as refuse collection etc., Police</p> <p><u>Place specific reference is likely to consist of:</u> Locational details, Named parts of urban area Specific details of the improvement schemes etc. Statistics</p>	7

Question	Answer	Marks
3(a)(ii)	Wind vane/sock; The arrow points in the direction the wind is blowing <u>from</u> 2 @ 1 mark	2
3(a)(iii)	Wind speed (Air/atmospheric) Pressure Temperature 3 @ 1 mark	3
3(a)(iv)	Ideas such as on 29th March: Humidity is (slightly) higher on 29th/lower on 31st/increases; Air pressure is lower; Cloud base is lower Wind is from WSW but 31 st March it is from north; Wind speed is higher; Temperature is lower etc. 4 @ 1 mark	4
3(b)(i)	Ideas such as: Inland/central/centre; Eastern/SE part of island; North west of Suva; South East of Lautoka; South/SE coast/touches coast near Suva/extends to SE coast; 3 @ 1 mark	3
3(b)(ii)	Should be in open space; Not covered by trees/away from buildings; Put it into/partially into ground; Leave for 24 hours/specified/even time period/check same time every day/record every day; Allow ice to melt; Pour water into measuring cylinder/measure water collected in a cylinder/read off in millimetres; Empty water/replace empty collecting jar/reset; etc. 5 @ 1 mark or development	5

Question	Answer	Marks
3(c)	<p>Levels marking</p> <p><u>Level 1</u> (1–3 marks) Statements including limited detail which describe the hazards for people caused by flooding.</p> <p><u>Level 2</u> (4–6 marks) Uses named example.</p> <p>More developed statements which describe the hazards for people caused by flooding.</p> <p>(Note: Max 5 if no named or inappropriate example for wrong hazard)</p> <p><u>Level 3</u> (7 marks) Uses named example.</p> <p>Comprehensive and accurate including some place specific reference.</p> <p><u>Content Guide:</u> Answers are likely to refer to: Deaths and injuries Damage to property Damage to possessions Disruption of transport Damage to crops/farmland/livestock Water borne disease Economic losses etc.</p> <p><u>Place specific reference is likely to consist of:</u> Locational details, Statistics</p>	7

Question	Answer	Marks
4(a)(i)	Wearing/breaking away of the land/coast by the sea/waves;	1
4(a)(ii)	X is exposed to (prevailing) winds/waves will be large/fetch will be long; Y is sheltered/protected/blocked by land; etc. 2 @ 1 mark	2
4(a)(iii)	<p>Cliff/wave cut platform: Sedimentary rock/layers; Stepped appearance; Grey/(light) brown;</p> <p>Cliff: Steep/vertical;</p> <p>Wave cut platform: Flat/gently sloping;</p> <p>Note: No reserve on cliff/wave cut platform</p> <p>3 @ 1 mark</p>	3
4(a)(iv)	<p>Ideas such as: High tide/storm; Undercutting/erosion at base/notch forms Hydraulic action (or description) Corrasion/abrasion (or description); Cliff collapses/becomes unstable; Cliff retreats; Wave cut platform remains/base of previous cliff; etc.</p> <p>4 @ 1 mark</p>	4
4(b)(i)	<p>Seawall = concrete/manmade/stone wall built to cover cliff/in front of coast/town;</p> <p>Revetment = wood/steel/concrete panels/slats at 45 degree angle/at an angle at base of cliff/in front of coast;</p> <p>Groyne = wooden/concrete extension from beach into/downwards into sea/at right angles;</p> <p>Beach nourishment = putting sand/pebble/rocks on a beach/artificially adding sand at intervals to the beach</p> <p>Rock armour = big/heavy/granite rocks placed at base of cliff/coast/in front of sea wall;</p> <p>Gabion = Cages/boxes containing rocks/concrete/sand at base of cliff/coast;</p> <p>3 @ 1 mark</p>	3

Question	Answer	Marks
4(b)(ii)	<p>No mark for choice of method. Marks for justification which could be combination of advantages of chosen method and reasons for rejection of others.</p> <p>e.g. groynes: Will prevent the beach being washed away; By trapping sand (dev); The wider beach will reduce the power of the waves; And the groynes will also act as breakwaters; Revetments would only protect the base of the cliff; Long term/short term; Cheaper/expensive; Ugly/attractive; etc.</p> <p>5 @ 1 mark or development</p>	5
4(c)	<p>Levels marking</p> <p><u>Level 1</u> (1–3 marks) Statements including limited detail which describe the hazards faced by people. Coastal erosion(L1), High/freak waves (L1),Tsunami (L1) Coastal flooding (L1)</p> <p><u>Level 2</u> (4–6 marks) Uses named example.</p> <p>More developed statements which <u>describe</u> the hazards faced by people, so either the hazard or describing the problems faced by people.</p> <p>Coastal erosion and so houses collapse (L2) Tsunami would kill people (L2) Tsunami is a big wave caused by an earthquake (L2)</p> <p>(Note: Max 5 if no named or inappropriate example)</p> <p><u>Level 3</u> (7 marks) Comprehensive and accurate statements, including place specific information.</p> <p><u>Content Guide:</u> Answers are likely to refer to: Erosion Coastal flooding Tropical storms etc. Tsunamis Landslide High waves/freak waves</p> <p><u>Place specific reference is likely to consist of:</u> Named places, Named storms etc.</p>	7

Question	Answer	Marks
5(a)(i)	0.7 – 0.8 1 mark	1
5(a)(ii)	Brazil/Peru/Ecuador/Colombia/Venezuela; Argentina/Chile; 2 @ 1 mark	2
5(a)(iii)	HDI is a composite indicator of development; Most people who live in a country with a high HDI will be well educated; The higher the HDI the longer people are likely to live 3 @ 1 mark	3
5(a)(iv)	Ideas such as: Increasing life expectancy/decreasing DR; Increasing income/GNI/GNP/GDP; Increasing years of schooling/more children educated; More hospitals built; More doctors/nurses employed; Development of new medicines/drugs; Building of schools/universities; Aid/investment in education/health care; Building of factories/more wealth generated from industry; Establishment of/higher income from service sector (or examples); MNCs/TNCs established; etc. 4 @ 1 mark	4
5(b)(i)	Positive relationship/correlation; Countries with higher GDP per person use more energy/lower GDP use less energy; However the relationship is not perfect/not linear; Reference to the GDP and energy of two countries to illustrate either point (Max 1) 3 @ 1 mark	3
5(b)(ii)	Ideas such as countries with high GDP: Have more vehicles/cars/transport/low GDPs will walk; So will use more oil (dev); Are more likely to use air travel; As they travel for business/leisure (dev) Have more industries/lower GDPs have more farming; (Industries) which will use fuel/power (dev) More likely to have electricity in homes/lighting/heating/electrical gadgets/examples such as phone/washing machine; More mechanised/less manual labour/in low GDP; etc. 5 @ 1 mark or development	5

Question	Answer	Marks
5(c)	<p>Levels marking</p> <p><u>Level 1</u> (1–3 marks) Statements including limited detail which describe the advantages and/or disadvantages of a transnational corporation on an LEDC.</p> <p><u>Level 2</u> (4–6 marks) Uses named example.</p> <p>More developed statements which describe the advantages and/or disadvantages of a transnational corporation on an LEDC.</p> <p>(Note: Max 5 if no named or inappropriate example)</p> <p><u>Level 3</u> (7 marks) Uses named example. Comprehensive and accurate statements referring to advantages and disadvantages, including some place specific reference.</p> <p><u>Content Guide:</u></p> <p>Answers are likely to refer to: Creation of jobs Wealth creation Infrastructural development Development of communications network Exploitation Low wages Specified pollution etc.</p> <p><u>Place specific reference is likely to consist of:</u> Specific details about TNC Named areas within the country where TNC operates Statistical detail</p>	7

Question	Answer	Marks
6(a)(i)	Plot on graph	1
6(a)(ii)	Primary = farming/fishing/mining etc. Tertiary = teaching/banking/working in an office/driver/doctor etc. 2 @ 1 mark	2
6(a)(iii)	Sweden has: More tertiary; Less primary; more secondary; Main employment in Sweden is tertiary but in Myanmar it is primary (Or could refer to Myanmar but answer must be comparative) 3 @ 1 mark	3
6(a)(iv)	Ideas such as: Ideas such as: More mechanization/technology in Sweden; Many (subsistence) farmers in Myanmar; More Industrialization/building of factories in Sweden/few factories in Myanmar/more TNCs in Sweden; Exhaustion/lack of natural resources in Sweden/more natural resources to exploit in Myanmar; Better skills/education in Sweden; People can afford more services/examples in Sweden; Sweden can import more; More tourism in Sweden; etc. 4 @ 1 mark	4
6(b)(i)	Use components/different/premade parts; Produced by different factories/suppliers; These are put together; 3 @ 1 mark	3
6(b)(ii)	Ideas such as: Near roads; Near railways/railway stations; Near ports/harbours/rivers/canals; Near airports; To transport raw materials/inputs/imports; To transport finished goods/outputs/exports; To reduce costs; To increase speed; Especially bulky materials(dev); Especially perishable goods (dev) 5 @ 1 mark or development	5

Question	Answer	Marks
6(c)	<p>Levels marking</p> <p><u>Level 1</u> (1–3 marks) Statements including limited detail which describe local and/or global environmental risks of an economic activity.</p> <p><u>Level 2</u> (4–6 marks) Uses named example.</p> <p>More developed statements describe local and/or global environmental risks of an economic activity</p> <p>(Note: Max 5 if no named or inappropriate example)</p> <p><u>Level 3</u> (7 marks) Uses named example. Comprehensive and accurate statements, which describe local and global environmental risks of an economic activity including some place specific reference.</p> <p><u>Content Guide:</u> Reference can be made to any economic activity at any scale, such as: Agriculture Manufacturing Tourism Forestry Mining Fishing Power generation etc.</p> <p>Depending on the choice of economic activity impacts may include: Soil erosion Loss of vegetation Destruction of habitats Loss of food chains Water pollution Air pollution Death of wildlife Global warming Acid rain etc.</p> <p><u>Place specific reference is likely to consist of:</u> Locational details of economic activity; Names of place within chosen area Specific details of/data on impacts on species etc.</p>	7