

#### GEOGRAPHY

0460/11 October/November 2017

Paper 1 MARK SCHEME Maximum Mark: 75

Published

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Cambridge Assessment

| Question  | Answer   | Marks |
|-----------|--|-------|
| 1(a)(i)   | ChinaIndiaPakistan   | 1     |
|           | Correct order needed for 1 mark  |       |
| 1(a)(ii)  | Ideas such as:   | 2     |
|           | Distribution – Borneo is more even;  |       |
|           | Density – Sumatra is more densely populated/has more people living on the island/Borneo is more sparsely (less densely) populated  |       |
|           | Note: Answers must be comparative 2 @ 1 mark   |       |
| 1(a)(iii) | Ideas such as:   | 3     |
|           | <ul> <li>uneven distribution;</li> <li>most people live/densely populated in the east/south east;</li> <li>few people live/sparse population in west/north west/centre;</li> <li>dense/more people live on the coast/near the sea;</li> <li>dense/more people live in river valleys</li> <li>few people live near international borders (or example) etc.</li> <li>3 @ 1 mark</li> </ul>   |       |
| 1(a)(iv)  | Ideas such as:   | 4     |
|           | <ul> <li>it is landlocked/has no coastline/it is inland;</li> <li>long distance from/no ports/trade (importing/exporting goods) would be difficult;</li> <li>mountains/steep/high;</li> <li>desert/arid area/lack of water;</li> <li>cold/long winters;</li> <li>few jobs;</li> <li>lack of resources;</li> <li>infertile soils/difficult to grow crops/produce food;</li> <li>political instability etc.</li> <li>4 @ 1 mark</li> </ul> |       |
| 1(b)(i)   | Ideas such as:   | 3     |
|           | <ul> <li>there is a positive relationship between total population and population density/the cities with high density have a large total population;</li> <li>however it is not perfect/there is an exception/except Manila;</li> <li>1 mark for using statistics for two cities to illustrate either of the above points. (i.e. 4 correct figures needed but units are not essential)</li> <li>3 @ 1 mark</li> </ul>                   |       |

| Question | Answer   | Marks |
|----------|--|-------|
| 1(b)(ii) | Ideas such as:   | 5     |
|          | Poor quality/not enough housing/living spaces/need to invest<br>more on housing;<br>increased pressure on hospitals/health services/need to invest<br>more in health services;<br>increased pressure on education/need to build more<br>schools/colleges;<br>traffic congestion/need to improve road network;<br>unemployment/lack of work/need to create more work<br>opportunities;<br>specified crime (e.g. violence/robbery/theft)/need to maintain<br>security/need to finance police force;<br>lack of/need to provide clean/reliable water supply;<br>lack of/need to provide good sanitation/sewage disposal;<br>lack of/need to provide electricity;<br>problems associated with waste disposal;<br>need for more public transport; |       |
|          | air pollution;<br>water pollution;<br>noise pollution etc.   |       |
|          | 5 @ 1 mark or development  |       |

| Question | Answer   | Marks |
|----------|--|-------|
| 1(c)     | Levels marking   | 7     |
|          | Level 1 (1–3 marks)<br>Statements including limited detail which explain why people have migrated<br>from one country to another.  |       |
|          | Level 2 (4–6 marks)<br>Uses named example.<br>More developed statements which explain why people have migrated from<br>one country to another.   |       |
|          | (Note: Max 5 if no named or inappropriate example)   |       |
|          | Level 3 (7 marks)<br>Uses named example.<br>Comprehensive and accurate statements including some place specific<br>reference.  |       |
|          | Content Guide:<br>Answers are likely to refer to:<br>Employment/wealth,<br>Health care,<br>Education,<br>Drought,<br>Food supplies,<br>Natural disasters,<br>To be near friends/family,<br>Political issues,<br>War etc. |       |
|          | Note: No double credit for pulls and pushes. Development is of the explanation.  |       |
|          | Place specific reference is likely to consist of:  |       |
|          | Named parts of the chosen countries/locational detail,<br>Population data etc.   |       |

| Question  | Answer  | Marks |
|-----------|---|-------|
| 2(a)(i)   | ParisCairoNew York  | 1     |
|           | Correct order needed for 1 mark   |       |
| 2(a)(ii)  | Completion of graph:  | 2     |
|           | London 0.8<br>Lagos 0.25<br>2 @ 1 mark  |       |
| 2(a)(iii) | Ideas such as :   | 3     |
|           | High levels of/some people experience poverty/no money;<br>high crime levels (or example);<br>some people have poor housing conditions/homelessness;<br>growth of squatter settlements/slums/shanty towns;<br>some/many people cannot afford education for their children;<br>some/many people cannot afford medical care;<br>some/many people cannot afford clean/reliable water;<br>some/many people do not have access to electricity;<br>some/many homes lack hygiene/have poor sanitation;<br>some/many people cannot afford food/balanced diet;<br>social conflict etc. |       |
|           | 3 @ 1 mark  |       |
| 2(a)(iv)  | Ideas such as:<br>Lots of wealth created in the cities/big businesses/industrial (commercial<br>centres);<br>the highly paid jobs are in the cities/some people make lots of money;<br>but many people do not have employment/lack jobs/are poorly paid;<br>as they don't possess the skills/education;<br>many work in the informal sector;<br>there are no state benefits for those in poverty;<br>there are so many poor people that it is impossible for charities to help them<br>all;<br>racism/discrimination;<br>exploitation etc.<br>4 @ 1 mark                      | 4     |
| 2(b)(i)   | Ideas such as:  | 3     |
|           | Uneven/clustered;<br>close to/around/surrounding CBD/near the city centre/or accept correct<br>distance;<br>especially just to east/west of it;<br>in the southern part of the city;<br>close to the sea/around the harbour<br>3 @ 1 mark   |       |

| Question | Answer  | Marks |
|----------|---|-------|
| 2(b)(ii) | Ideas such as:  | 5     |
|          | it is unlikely that any of the ideas listed will end poverty by itself;<br>improving security will mainly protect rich people and property;<br>though some poor people may get jobs/e.g. as security guards;<br>building housing will only help people who can afford houses;<br>though some poor people may get jobs in construction;<br>if houses are affordable it will benefit some people;<br>the people experiencing poverty are unlikely to have the skills to<br>work in high technology industry so that will not help much;<br>but they will create some low skill jobs/such as cleaning;<br>Free use of public transport may help by enabling people to attend<br>interviews/travel to work/can spend money on other<br>necessities;<br>but many of the really poor will not have jobs anyway etc.<br>Note: Be prepared to accept any valid ideas in addition to the above if the<br>reasoning is good.<br>5 @ 1 mark or development |       |

| Question | Answer   | Marks |
|----------|--|-------|
| 2(c)     | Levels marking   | 7     |
|          | Level 1 (1–3 marks)<br>Statements including limited detail which describe strategies used to reduce<br>traffic congestion.   |       |
|          | Level 2 (4–6 marks)<br>Uses named example.<br>More developed statements which describe strategies used to reduce traffic<br>congestion.  |       |
|          | (Note: Max 5 if no named or inappropriate example)   |       |
|          | Level 3(7 marks)Uses named example.Comprehensive and accurate statements, with some place specific reference.  |       |
|          | Content Guide:<br>Answers are likely to refer to;<br>Ring roads,<br>Build /improve/repair roads<br>By pass,<br>Pedestrianization,<br>Public transport,<br>Cycle lanes/bike hire schemes,<br>Park and ride;<br>Congestion charges;<br>Traffic lights;<br>Speed bumps etc. |       |
|          | <u>Place specific reference is likely to consist of:</u><br>Locational details/named places within the urban area,<br>Specific details of schemes<br>Named policies etc.   |       |

| Question  | Answer   | Marks |
|-----------|--|-------|
| 3(a)(i)   | 360 1 mark   | 1     |
| 3(a)(ii)  | Ideas such as: <ul> <li>mangroves are in south/in river estuary/next to river;</li> <li>coral reefs are on east/north of island/further out to sea/around</li> </ul>   | 2     |
|           | islands/coral reefs are widespread/all around island etc.<br>2 @ 1 mark  |       |
| 3(a)(iii) | Ideas such as mangroves:<br>Grow between high and low water mark;<br>Evergreen trees<br>Salt tolerant/live in brackish water/salty water/live in sea water/are<br>halophytes;<br>Aerial roots;<br>Salt filtering roots;<br>Salt excreting leaves;  | 3     |
|           | Prop roots etc. 3 @ 1 mark   |       |
| 3(a)(iv)  | Ideas such as:<br>Warm <u>water</u> /temperatures between 18–27 degrees C (accept figure<br>within range);<br>Shallow water/not more than 60 metres deep;<br>Water free from sediment/clear/clean/not polluted/sunlight able to<br>penetrate the water;<br>Plentiful supply of oxygen in water;<br>Plentiful supply of plankton;<br>In areas of gentle waves/currents/calm/slow moving water;<br>Neutral/high pH/alkaline water;<br>Salty water etc.<br>4 @ 1 mark | 4     |
| 3(b)(i)   | Ideas such as:<br>mangroves reduce wave heights;<br>coral reefs absorb/reduce wave energy/power/act as a barrier;<br>oyster reefs act as breakwaters/reduce power of waves<br>3 @ 1 mark   | 3     |

| Question | Answer   | Marks |
|----------|--|-------|
| 3(b)(ii) | Methods such as:<br>Offshore breakwaters;<br>Sea walls;<br>Groynes;<br>Beach replenishment/nourishment;<br>Gabions;<br>Revetments;<br>Managed retreat;<br>Rip raps;<br>Insert drains in cliffs;<br>Plant vegetation etc. | 5     |
|          | Note: Accept names of methods or descriptions – or if both are provided accurate description can be credited as development.<br>5 @ 1 mark or development  |       |
| 3(c)     | Levels marking   | 7     |
|          | Level 1 (1–3 marks)<br>Statements including limited detail which explain how headlands and bays<br>are formed.   |       |
|          | Level 2 (4–6 marks)<br>More developed statements which explain how headlands and bays are<br>formed.   |       |
|          | Level 3 (7 marks)<br>Comprehensive and accurate statements which explain how headlands and<br>bays are formed, including named process detail.   |       |
|          | Content Guide:<br>Answers are likely to refer to:<br>Hydraulic action;<br>Abrasion/corrasion;<br>Corrosion;<br>Hard/soft rocks;<br>Joints/bedding planes;<br>Differential erosion etc.                                   |       |
|          | Note: Credit any descriptive detail or explanation on diagram but do not double credit with text.  |       |

| Question  | Answer   |                        | Marks |
|-----------|--|------------------------|-------|
| 4(a)(i)   | 26 °C and 2800 mm  | 1 mark                 | 1     |
| 4(a)(ii)  | Annual temperature range is small/2 °C;<br>Average temperatures are high all year/temperatures above 25<br>year/consistently high;<br>There are no seasons/there is no winter;<br>Annual rainfall is high;<br>Every month has rainfall etc.  | 5 °C all<br>2 @ 1 mark | 2     |
| 4(a)(iii) | Ideas such as:   |                        | 3     |
|           | heating by sun/high temperatures/direct sunlight;<br>high humidity/it is humid;<br>evaporation/transpiration/evapotranspiration;<br>ascending air/convection;<br>cooling;<br>condensation;<br>cumulus or cumulonimbus clouds form;<br>saturation/air mass cannot hold any more water;<br>repeated each day etc.;   | 3 @ 1 mark             |       |
| 4(b)(i)   | Ideas such as:   |                        | 3     |
|           | loss of traditional culture;<br>lack of fuelwood;<br>lack of drinking water;<br>floods;<br>landslides;<br>soil erosion;<br>loss of species used for food etc.  | 3 @ 1 mark             |       |
| 4(b)(ii)  | Ideas such as:   |                        | 4     |
|           | reduction of interception;<br>all the rainfall reaches the ground;<br>no tree roots to slow water down/absorb water;<br>soil soon becomes saturated;<br>surface of soil becomes impermeable;<br>large amount of surface run off occur/less infiltration occurs;<br>soil erosion occurs/soil washed into rivers;<br>river silts up/capacity reduced;<br>water is displaced etc. | 4 @ 1 mark             |       |

| Question  | Answer   | Marks |
|-----------|--|-------|
| 4(b)(iii) | Ideas such as:<br>Governments prioritise economic development/to make money/to generate<br>development;<br>Allowing MNCs permission to exploit the rainforest:<br>For logging/export of wood;<br>Wood for furniture/paper making;<br>For mining (or example);<br>Road building;<br>Building dams/generating HEP;<br>Cattle ranching;<br>Growing crops/agriculture;<br>Housing/settlement<br>5 @ 1 mark or development  | 5     |
| 4(c)      | Levels marking       (1–3 marks)         Statements including limited detail which explain why a desert area is hot and/or dry.       (4–6 marks)         Level 2       (4–6 marks)         Uses named example.       More developed statements which explain which explain why a desert area is hot and/or dry.         (Note: Max 5 if no named or inappropriate example)       (7 marks)         Level 3       (7 marks)         Comprehensive and accurate statements which explain why a desert area is hot and dry, including some place specific reference.       (7 marks)         Content Guide:       Answers are likely to refer to: high pressure descending air no cooling/condensation rain shadow cold currents inland location/long way from sea/not near any water bodies direct/overhead/high angle sun lack of clouds offshore winds few rivers/lakes/sources of water etc.         Place specific reference is likely to consist of: Locational details including reference to tropics, Names of cold currents statistical details, distances etc. | 7     |

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| Question  | Answer  | Marks |
|-----------|---|-------|
| 5(a)(i)   | A sunny climate 1 mark  | 1     |
| 5(a)(ii)  | Types of scenery such as:<br>Mountains/hills/uplands;<br>Cliffs/arches/stacks/headlands/beaches/bays/sand dunes/coasts/caves;<br>Rivers/valleys/gorges/waterfalls;<br>Forests or specified vegetation type;<br>Volcanic scenery/volcano/sill/dyke;<br>Lakes etc.<br>2 @ 1 mark                          | 2     |
| 5(a)(iii) | Ideas such as cities have attractions such as:<br>History/historical buildings/castles/museums/monuments/statues;<br>religious buildings/cathedrals;<br>famous buildings/landmarks/towers;<br>culture/theatres/cinemas/galleries;<br>restaurants/bars/nightlife;<br>shopping centres etc.<br>3 @ 1 mark | 3     |
| 5(b)(i)   | Attractions such as:<br>wildlife;<br>valley;<br>plateau/table land/rock outcrops/mountains/hills;<br>market stalls/variety of fruits & vegetables to buy;<br>resort/hotel/swimming pool;<br>tropical vegetation/forest;<br>cave/restaurant;<br>lake/reservoir/dam/river etc.<br>3 @ 1 mark              | 3     |
| 5(b)(ii)  | Ideas such as:<br>Loss of natural vegetation/plants die/deforestation;<br>Loss of habitats;<br>Death/injury to/extinction of wildlife;<br>Noise disturbs wildlife;<br>Air pollution;<br>Lowering of water table;<br>Visual pollution/views spoilt;<br>Water pollution etc.<br>4 @ 1 mark                | 4     |

| Question  | Answer   | Marks |
|-----------|--|-------|
| 5(b)(iii) | Ideas such as:   | 5     |
|           | Creation of National Parks;<br>Limit numbers of tourists;<br>Charge entrance fees;<br>Which can be spent on conservation;<br>Fence/limit access to sensitive areas/areas where there is lots of wildlife;<br>Ban hunting;<br>Only allow people access to an area with a guide;<br>Educate people about caring for the environment;<br>Develop ecotourism;<br>Promote recycling/litter bins;<br>Erect signs/notices/provide information about;<br>Build pathways/boardwalks;<br>Use renewable energy or example (e.g. electric vehicles, solar power in<br>hotels, encourage cycling) etc.<br>5 @ 1 mark or development |       |

| Question | Answer  | Marks |
|----------|---|-------|
| 5(c)     | Levels marking  | 7     |
|          | Level 1 (1–3 marks)<br>Statements including limited detail which explain how tourism has a positive<br>and/or<br>negative impact on local people.   |       |
|          | Level 2 (4–6 marks)   |       |
|          | Uses named example.<br>More developed statements which explain how tourism has a positive and/or<br>negative impact on local people.  |       |
|          | (Note: Max 5 if no named or inappropriate example)  |       |
|          | Level 3 (7 marks)<br>Uses named example.<br>Comprehensive and accurate statements explain how tourism has a positive<br>and negative impact on local people, including some place specific reference.   |       |
|          | Content Guide:         Answers are likely to refer to:         Employment         Infrastructural development/water/electricity supplies improved         Road/airport development         Increased business opportunities         Cultural exchange         Noise         Seasonal employment         Loss of farmland         Air pollution causes asthma/breathing difficulties         Tourists given priority for water supplies         Increase in prices/inflation         Culture clashes etc.         Place specific reference is likely to consist of:         Locational details,         Named areas         Details of transport routes etc. |       |

| Question  | Answer  | Marks |
|-----------|---|-------|
| 6(a)(i)   | Agriculture 1 mark  | 1     |
| 6(a)(ii)  | Reasoning as appropriate to economic activity chosen<br>e.g. manufacturing:<br>- wildlife poisoned/killed by fumes;<br>- and by pollution of water courses;<br>- forest/vegetation cut down/deforestation<br>- loss of habitat<br>- destruction of food chains etc.<br>2 @ 1 mark   | 2     |
| 6(a)(iii) | Ideas such as:<br>Fossil fuels/coal/oil/natural gas are burnt;<br>Carbon dioxide/greenhouse gases/water vapour/oxides of sulphur & nitrogen<br>build up in the atmosphere;<br>heat is trapped/cannot escape/it acts like a greenhouse etc.<br>3 @ 1 mark  | 3     |
| 6(a)(iv)  | Ideas such as:<br>melting of ice caps/glaciers;<br>loss of natural habitat;<br>rising sea/water levels;<br>flooding of low lying islands/countries;<br>loss of food sources for wildlife;<br>loss of species/extinction/animals die (or example);<br>breaking of food chains/threats to predators;<br>diversion of cold ocean currents;<br>warming of sea water can destroy/bleach coral;<br>increasing aridity/drought/desertification;<br>forest fires;<br>vegetation loss/trees die etc.<br>4 @ 1 mark | 4     |
| 6(b)(i)   | Ideas such as:<br>Loss of land/farmland/grazing land;<br>Loss of vegetation/trees;<br>Soil is made bare;<br>Gulleys/cliffs/steep slopes created in soil;<br>Soil washed away etc.<br>3 @ 1 mark   | 3     |

| Question | Answer  | Marks |
|----------|---|-------|
| 6(b)(ii) | Ideas such as:<br>deforestation;<br>grazing by animals;<br>removes vegetation cover;<br>especially if herds are too large;<br>overcultivation;<br>removes nutrients from soil;<br>and destroys structure of soil;<br>ploughing leaves soil bare;<br>soil dried out in arid conditions/drought;<br>so it can be blown away by wind;<br>heavy rainfall/storms/floods washes soil away etc.<br>5 @ 1 mark or development | 5     |
| 6(c)     | Levels marking  | 7     |
|          | Level 1 (1–3 marks)<br>Statements including limited detail which describe the importance of different<br>forms of energy supply.  |       |
|          | Level 2 (4–6 marks)<br>Uses named example.<br>More developed statements which describe the importance of different forms<br>of energy supply.   |       |
|          | (Note: Max 5 if no named or inappropriate example)  |       |
|          | Level 3 (7 marks)<br>Uses named example.<br>Comprehensive and accurate statements, including some place specific<br>reference.  |       |
|          | <u>Content Guide:</u><br>Answers are likely to refer to the different forms of energy supply :<br>Wood/charcoal<br>Fossil fuels<br>Renewable forms of energy<br>Nuclear power   |       |
|          | Place specific reference is likely to consist of:<br>Locational details;<br>Names of places/species within chosen country   |       |