Cambridge Assessment International Education

Cambridge IGCSE™

GEOGRAPHY **0460/11**

Paper 1 Geographical Themes **October/November 2022**

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 2022 series for most Cambridge IGCSE™, Cambridge International A and AS Level components and some Cambridge O Level components.

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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.

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Each question carries 25 marks. Candidates cannot earn above the maximum marks available within each sub section.

The marking scheme attempts to give guidance about the requirements of each answer and lists a number of responses, which will earn marks along with the general principles to be applied when marking each question.

It should be noted that candidates can earn marks if their answers are phrased differently provided, they convey the same meaning as those in the mark scheme. THE CANDIDATES DO NOT NEED TO USE THE SAME WORDING TO EARN MARKS.

The notation 'etc.' at the end of an answer in the mark scheme signifies that there may well be other correct responses or examples that can be given credit. Providing the statement is true, relevant to the question asked and not repetition of a previous point made credit should be given.

A point made within one sub-section which is an answer to the question set in a different sub-section should not be given credit as each sub-section asks different questions which require independent answers.

The mark scheme uses semi colons (;) to separate marks and diagonals to separate alternative answers.

During coordination, the mark scheme is modified to add points agreed after discussion or to delete any points not allowed. All examiners should ensure that their modified scheme is fully up to date before marking begins.

Marking Mechanics

Point marking is used for sections (a) and (b) of each question, although marks are available in specified questions for development of appropriate points. Ticks should be used to clearly indicate where a mark has been allowed. Where a development point has been allowed the symbol "DEV" should be placed adjacent to the tick. The number of ticks should always be equal to the total number of marks awarded. Only one development mark for each mark scheme point please.

Where a candidate makes a point which is not quite sufficient for credit an upturned 'V' insert symbol should be used. If after careful consideration a mark is awarded which gives 'benefit of doubt' to the candidate, the letter 'J' should be placed adjacent to the tick (i.e., the candidate has 'just' achieved the mark).

Crosses are acceptable to signify wrong answers and the letters 'I/R' should be used to indicate those which are irrelevant.

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.

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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.

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Question	Answer	Marks
1(a)(i)	Number of births per year per 1000 population 1 mark	**1**
1(a)(ii)	Both the birth rate and death rate have declined overall; The birth rate has fluctuated more than the death rate; 2 @ 1 mark	**2**
1(a)(iii)	1950: 37 – 18 = 19 (1st mark) 2020: 10.5 or 11 – 8 = 2.5 or 3 (2nd mark) (19 – 2.5 or 3) = 16.5/16 (3rd mark) OR BR: 37 – 10.5 or 11 = 26.5 or 27 (1st mark) DR: 18 – 8 = 10 (2nd mark) (26.5 or 27 – 10) = 16.5 or 16 (3rd mark) Only credit change in birth and death rate change if candidate then calculates natural population change. 3 @ 1 mark	**3**
1(a)(iv)	Ideas such as: It declines/overall decline in birth rate; Initial increase in birth rate/between 1979 and 1987; Fluctuating up to 1987; Continuous decline from 1987; Decline steeply to 2005/from 1987 to 2003; Decline levels off at the end/between 2003 and 2015. Reference to supporting statistics e.g., 1979 – 16/17 per 1000 to 2015 12/13 per 1000 (Max 1 reserve) etc. 4 @ 1 mark	**4**
1(b)(i)	Ideas such as: It reduces/overall reduction; Decrease below age of 55/54 and under/younger economically active; Increase in 55–64 / 55–59 and 60–64/older economically active; More even distribution within age bands; Slightly bigger gender imbalance/slightly more men than women; Largest bar is 20–24 in 2010 but in 2050 it is 60–64. 3 @ 1 mark	**3**

Question	Answer	Marks
1(b)(ii)	Ideas such as: Higher dependency ratio; Tax increases are likely/they do not pay tax; Have to support them/have to care for them/they are a burden on economically active (or the country)/causes pressure on working population; Need for/cost of providing pensions; Need for/cost of services such as healthcare/more health care needs; Need for/cost of social care/care homes; Lack of investment in education/services for young people; Lack of workforce/innovation; Need to attract workers from abroad/problems caused by immigration; Difficulty of defending country; Slows economic development/economic decline, etc. 5 @ 1 mark or development	**5**
1(c)	**Levels marking:** <u>Level 1</u> (1–3 marks) Statements including limited detail which describe the problems caused by overpopulation. <u>Level 2</u> (4–6 marks) Uses named example. More developed statements which describe the problems caused by overpopulation. (**Note:** Max 5 if no named or inappropriate example) <u>Level 3</u> (7 marks) Uses named example. Comprehensive and accurate statements including some place specific reference. <u>Content Guide:</u> Answers are likely to refer to: Employment; Poverty; Food supply; Provision of health care; Provision of housing/shelter; Water supply; Sanitation; Provision of education; Air/water pollution, etc. **Note:** Allow crime as dev. only. <u>Place specific reference is likely to consist of:</u> Named parts of the chosen country, Population data, etc.	**7**

Question	Answer	Marks
2(a)(i)	Increasing proportion/percentage of the population of a country living in urban areas. 1 mark	**1**
2(a)(ii)	Total population: China….India….Indonesia Percentage living in urban areas: Indonesia….China…..India Correct order required in each case for 1 mark. 2 @ 1 mark	**2**
2(a)(iii)	Ideas such as: Lack of/more/better employment; Lack of/more/better health care; Lack of/more/better education; Lack of/more/better entertainment/bright lights; Lack of/more/better electricity; Lack of/more/better water provision; Availability of food; To escape drought; To escape flood; Mechanisation of farms; Division of farmland, etc. Accept pulls or pushes but do not double credit. 3 @ 1 mark	**3**
2(a)(iv)	*Benefits* such as: Remittances sent back; Less pressure on employment; Less pressure on healthcare; Less pressure on food supply; Less pressure on water supply; Less pressure on education facilities; New skills brought back when migrants return, etc. *Disadvantages* such as: Brain drain/loss of skills; Less workforce or example such as farmers; Less food/agricultural production; Gender imbalance/less partners; Imbalance in age structure/mainly old and young are left/higher dependent population; Schools close; Shops close/less customers; Family breakdowns, etc. 4 @ 1 mark	**4**

Question	Answer	Marks
2(b)(i)	Ideas such as: Made from waste materials/wood; Corrugated/metal sheets; Close together/densely packed; (Mainly) single storey; No windows; etc. 3 @ 1 mark	**3**
2(b)(ii)	Ideas such as: Flimsy/easily destroyed by elements/or example; Lack of privacy; Dark inside; Lack of water; Water borne diseases/e.g. cholera; Presence of mosquitos/risk of malaria; Spread of diseases/vermin; Flooding; Fire risk; Lack of security; No electricity supply; No sanitation; Difficult to get into houses. 5 @ 1 mark or development	**5**

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Question	Answer	Marks
2(c)	**Levels marking:** Level 1 (1–3 marks) Statements including limited detail which describe what has been done to reduce housing problems. Level 2 (4–6 marks) Uses named example. More developed statements which describe what has been done to reduce housing problems. (**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: Answers can refer to any city – LEDC or MEDC and are likely to include reference to: Building high rise homes/apartments; (Local authority) investment in low-cost housing/housing for rental; Site and services schemes; Self-help; Investment in water/electricity infrastructure; Renewal/replacement of slum housing; Investment in rural areas; Strict planning regulations, etc. Place specific reference is likely to consist of: Locational details; Named schemes; Named areas/streets within the urban area, etc.	**7**

Question	Answer	Marks
3(a)(i)	Groyne 1 mark	**1**
3(a)(ii)	Ideas such as: Traps beach materials; Prevents longshore drift; Beach is retained/takes less beach away, etc. 2 @ 1 mark	**2**
3(a)(iii)	Ideas such as: Easily eroded/weaker sediment/coastline easily eroded; (To prevent loss of/collapse of) housing/property/people who live there/settlement/town; (To protect) roads/railways; (Protection of) farmland; Safety of residents/tourists; (To protect) tourist facilities (or example); (To protect) workplaces/industries (or example); (To protect) community facilities/schools/churches (or example); (To protect) historical features (or example); (To protect) port; etc. 3 @ 1 mark	**3**
3(a)(iv)	Examples such as: Sea wall/wall along coast; Revetments; Gabions; Breakwater; Rip-rap/large boulders at bottom of cliff/on beach; Beach nourishment/replacement; Plant vegetation on cliff; Cliff drainage, etc. One mark for the identification of each method and the second mark for explaining how it works. E.g., sea wall (1) reduces impact of waves/breaks power of waves/absorbs wave energy/strengthens the cliff (2). 4 @ 1 mark	**4**
3(b)(i)	Landforms such as: Wave cut platform; Cliff; Stack; Stump; Headland, etc. 3 @ 1 mark	**3**

Question	Answer	Marks
3(b)(ii)	Ideas such as: Hydraulic action; Power/pressure of breaking waves; Expansion of air in cracks; Abrasion; Pebbles/rocks thrown at cliffs by waves; Corrosion/solution; Minerals dissolved by acids in sea water; Undercuting; Collapse of overhanging material; etc. 5 @ 1 mark or development	**5**
3(c)	**Levels marking** <u>Level 1</u> (1–3 marks) Statements including limited detail which describe the opportunities for people of living in a coastal area. <u>Level 2</u> (4–6 marks) Uses named example. More developed statements which explain the opportunities for people of living in a coastal area. (**Note:** Max 5 if no named or inappropriate example). <u>Level 3</u> (7 marks) Comprehensive and accurate statements, including some place specific details. <u>Content Guide:</u> Answers will vary according to example chosen but are likely to refer to: Fishing; Work in tourism; Port development/trade; Flat land easy to build on; Fertile farmland; Ease of transportation; Aesthetic attraction, etc. <u>Place specific reference is likely to consist of:</u> Locational details, named places in coastal area, etc.	**7**

Question	Answer	Marks
4(a)(i)	Confluence 1 mark	**1**
4(a)(ii)	*the river is carrying a large load in suspension:* Brown colour/river appears 'dirty'/not transparent; *deposition is taking place:* Mud/silt/sediment/alluvium along/on/beside the river/on bank; 2 @ 1 mark	**2**
4(a)(iii)	Ideas such as: River is carrying large amounts of sediments/silt/load; River meets sea; Water slows down; Loses energy/cannot carry the load; Flocculation, etc. 3 @ 1 mark	**3**
4(a)(iv)	*River* nearer the source is likely to be: Narrower; Less discharge; Shallower; More winding; Steeper/less regular long profile/waterfalls present but not in fig.4.1; etc. *Valley* nearer the source is likely to be: More V shaped; Steeper (sides); Narrower/no flood plain; Interlocking spurs/waterfalls near source but meanders lower down, etc. 4 @ 1 mark	**4**
4(b)(i)	Ideas such as: Damage to homes/property/settlement/homeless; Possessions destroyed/carpets ruined; Roads flooded/communications disrupted/cars washed away/damaged; Deaths/drowning/injury; Need to evacuate; Factories/workplaces flooded/closed/unable to work; Schools/shops/churches (or another specific example) damaged; Crops/livestock/farmland destroyed/salination of soils/soil washed away; Electricity cut off; Water supplies polluted; Water borne disease/or example; Cost of rebuilding/repairs; etc. 3 @ 1 mark	**3**

Question	Answer	Marks
4(b)(ii)	Ideas such as: Build a dam/reservoir (upstream); Levees/embankments/barriers; Sandbags; Dredging; Overflow channels; Use sluice gates/spreading areas upstream; Straighten the river/line with concrete; Tree planting/reduce deforestation; Monitoring/prediction/early warning/alarms; Evacuation/move people away; Land use zoning/don't build near river; Fine if put waste/litter in river, etc. 5 @ 1 mark or development	**5**
4(c)	**Levels marking:** <u>Level 1</u> (1–3 marks) Statements including limited detail which explain why people live close to a river. <u>Level 2</u> (4–6 marks) Uses named example. More developed statements which explain why people live close to a river. (**Note:** Max 5 if no named or inappropriate example). <u>Level 3</u> (7 marks) Comprehensive and accurate statements, including some place specific details. <u>Content Guide:</u> Answers are likely to refer to: Fertile soils; Transport routes; Flat land; Domestic water supply; Industry; Irrigation; HEP; Fishing; Jobs in tourism, etc. <u>Place specific reference is likely to consist of:</u> Locational details; named places alongside river, etc.	**7**

Question	Answer	Marks
5(a)(i)	How the population is divided up/made up by the work they do/by which sector people are employed/proportion in primary, secondary and tertiary, etc. 1 mark	**1**
5(a)(ii)	*Primary*: farmer, miner, fisherman, forestry worker, etc. *Tertiary*: doctor, teacher, lorry driver, shopkeeper, banker, etc. **Note:** allow e.g., farming/mining. 2 @ 1 mark	**2**
5(a)(iii)	Ideas such as: More primary in Bangladesh; More secondary in Brazil; More tertiary in Brazil; Bangladesh highest is in primary but Brazil's highest is tertiary; 3 @ 1 mark	**3**
5(a)(iv)	Ideas such as: Lack of/exhaustion of natural resources; Mechanization of agriculture/manufacturing; More foods/manufactured goods or other example are imported; Good education/skills; High income jobs; More people live in towns/cities; Increasing demand/can afford services; Investment in services or example. 4 @ 1 mark	**4**
5(b)(i)	Ideas such as: Positive relationship/higher the HDI the greater percentage with access to improved water; However, relationship is not perfect/there are anomalies; e.g., countries with HDI above 0.6 tend to have 90% with access to improved water supplies; One country with HDI of over 0.7 has only 63% with access to improved water supplies, etc. 3 @ 1 mark	**3**

Question	Answer	Marks
5(b)(ii)	Methods such as: Reservoirs/dams; Use of aquifer; Rainfall harvesting; Road tankers; Wells; Bottled water; Pipelines; Water treatment plants; Water conservation strategies or example; Water transfer schemes; Desalination/take salt out; Education about conserving/polluting water; etc. 5 @ 1 mark or development	**5**

Question	Answer	Marks
5(c)	Levels marking: Level 1 (1–3 marks) Statements including limited detail which describe a TNC and/or explain why it has impacts at a local scale. Level 2 (4–6 marks) Uses named example. More developed statements which describe a TNC and/or explain why it has impacts at a local scale. (**Note:** Max 5 if no named or inappropriate example.) Level 3 (7 marks) Uses named example. Comprehensive and accurate statements which describe a TNC and explain why it has impacts at a local scale including some place specific reference. Content Guide: Descriptions are likely to refer to: Size; Ownership; Products; Raw materials; Methods of production; Global links; Branches in more than one country, etc. Impacts at a local scale referred to are likely to be: Employment; Exploitation; Competition with local businesses/employers; Specified pollution; Deforestation; Improved transport links; Improved electricity; etc. Place specific reference is likely to consist of: Locational details/named areas/country names – two needed. Specific details of issues/TNC, etc.	**7**

Question	Answer	Marks
6(a)(i)	Natural = beaches/limestone outcrops/unspoilt coastlines. Human = markets/temples/nightlife/cities. Both natural and human are required 1 mark	**1**
6(a)(ii)	Ideas such as: More flights/development of airports/cheaper flights/budget airlines; Advertising/promotion of; Development of/more tourist facilities in LEDCs e.g., such as hotels/more investment in tourism; Increased incomes; More <u>paid</u> holidays/more leisure time; Healthier/more active retirees/older people; People can book/research holidays on the internet; Wish to visit new/unspoilt destinations; etc. 2 @ 1 mark	**2**
6(a)(iii)	Ideas such as: Beaches/beach activities (or example); Clean/unpolluted seas/water activities/fishing (or other example); Unpolluted atmosphere; Visually attractive/aesthetic beauty/photography; Peaceful/quiet/relaxing; Wildlife or example of; etc. 3 @ 1 mark	**3**
6(a)(iv)	Examples such as: Dry weather/no rain; Temperature/hot/cold; Sunshine; Snow. One mark for the identification of each way and the second mark for explaining why it is important. No explanation mark if credit not given for identification. E.g., 1. Snow (1) so that skiing can take place (2). E.g., 2. Sunshine (1) so that people can spend time on the beach/bathing in the sea (2). 4 @ 1 mark	**4**

Question	Answer	Marks
6(b)(i)	Ideas such as: People may trample vegetation/footpath erosion; Visual pollution (e.g., boardwalk/railings); Clearance of vegetation (for buildings/huts/tourist stalls); Litter; Flowers picked; Water pollution/oil spills (from boats); Noise pollution (from boats/beach activities); Fish/marine life scared (by boats/swimmers); Kill/injure wildlife; Loss of habitat; Damage food chains; Overfishing; etc. 3 @ 1 mark	**3**
6(b)(ii)	Ideas such as: Creation of National Parks; Limit numbers of tourists; Charge entrance fees; Fence sensitive areas; Ban hunting; Limit/ban fishing; Do not allow (single use) plastic (cups/straws) on beach; Only allow people access to an area with a guide; Educate people about caring for the environment; Develop ecotourism; Litter/bins/fines; Use rowing boats (rather than motorboats)/control number of boats; Planning permission for developments/buildings must fit into surroundings; Develop other areas for tourism to reduce numbers visiting site; Rangers/guards; etc. 5 @ 1 mark or development	**5**

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Question	Answer	Marks
6(c)	**Levels marking:** Level 1 (1–3 marks) Statements including limited detail which describe the problems tourism causes for local people. Level 2 (4–6 marks) Uses named example. More developed statements which describe the problems tourism causes for local people. (**Note:** Max 5 if no named or inappropriate example). Level 3 (7 marks) Uses named example. Comprehensive and accurate statements, including some place specific reference. Content Guide: Answers are likely to refer to: Noise; Drunken/anti-social behaviour; Racism/discrimination; Litter; Traffic congestion; Some beaches become private/inaccessible; Seasonal employment; Loss of farmland; Air pollution causes asthma/breathing difficulties; Tourists given priority for water supplies; Increase in prices/inflation; Culture clashes/westernisation of culture; etc. Place specific reference is likely to consist of: Locational details, Named areas, Specific details of impacts, etc.	**7**

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