National
Qualifications
RESOURCE

X833/76/12

Geography
Global Issues and Geographical Skills

Marking Instructions

Please note that these marking instructions have not been standardised based on candidate responses. You may therefore need to agree within your centre how to consistently mark an item if a candidate response is not covered by the marking instructions.

General marking principles for Higher Geography

Always apply these general principles. Use them in conjunction with the detailed marking instructions, which identify the key features required in candidates' responses.

(a) Always use positive marking. This means candidates accumulate marks for the demonstration of relevant skills, knowledge and understanding; marks are not deducted for errors or omissions.

(b) If a candidate response does not seem to be covered by either the principles or detailed marking instructions, and you are uncertain how to assess it, you must seek guidance from your team leader.

(c) Where the candidate does not comply with the rubric of the paper and answers two parts in one section, mark both responses and record the better mark.

(d) Marking must be consistent. Never make a hasty judgement on a response based on length, quality of handwriting or a confused start.

(e) Use the full range of marks available for each question.

(f) The detailed marking instructions are not an exhaustive list. Award marks for other relevant points.

(g) Award marks only where points relate to the question asked. Where candidates give points of knowledge without specifying the context, award marks unless it is clear that they do not refer to the context of the question.

(h) Award marks for knowledge/understanding where points are:
- relevant to the issue in the question
- developed (by providing additional detail, exemplification, reasons or evidence)
- used to respond to the demands of the question (for example evaluate, analyse).

Marking principles for each question type
There is a range of question types in this question paper. For each question type, the following provides an overview of marking principles, and an example.

***Describe* questions**
Candidates gain marks for making relevant, factual points. These should be key points.
The points do not need to be in any particular order. Candidates may provide a number of straightforward points or a smaller number of developed points, or a combination of these. Candidates must provide more than an outline or list to gain marks. They could refer to, for example, a landscape feature, a landscape formation process, a situation or facts demonstrating geographical knowledge.

***Explain* questions**
Candidates gain marks for explaining or suggesting reasons for the cause or impact of something, or for referring to causal connections and relationships. Candidates must do more than describe to gain marks here.
- Where the question asks about a landscape feature, candidates should refer to the processes leading to landscape formation.
- For a source-based question, candidates should make use of these and refer to them within their answer for full marks.

Where candidates provide a purely descriptive answer, or one where development is limited, award no more than half the available marks for the question.
Other questions look for candidates to demonstrate higher-order skills and will use command words such as analyse, evaluate, to what extent, and discuss.

***Analyse* questions**
Candidates gain marks for identifying parts, the relationship between them, and their relationships with the whole; and for drawing out and relating implications.
Award an analysis mark where candidates use their knowledge and understanding or a source to identify relevant components (for example of an idea, theory, argument) and clearly show at least one of the following:

- links between different components
- links between component(s) and the whole
- links between component(s) and related concepts
- similarities and contradictions
- consistency and inconsistency
- different views or interpretations
- possible consequences or implications
- the relative importance of components
- understanding of underlying order or structure.

Where candidates are asked to analyse they should identify parts of a topic or issue and refer to the interrelationships between, or impacts of, various factors. For example, where a question asks for an analysis of the soil-forming properties which lead to the formation of a gley soil, candidates should refer to how the various soil formatting properties contributed to its formation.

***Evaluate* questions**
Candidates gain marks for making a judgement of the success, failure, or impact of something based on criteria. They should give a brief description of the strategy or project being evaluated, before offering an evidenced conclusion.

***Account for* questions**
Candidates gain marks for giving reasons which are often (but not exclusively) from a resource, for example: for a change in trade figures; a need for water management; or differences in development between contrasting developing countries.

***Discuss* questions**
Candidates gain marks for exploring ideas about a project, or the impact of a change.
They should consider different views on an issue or argument. This might not be a balanced argument, but they should give a range of impacts or ideas within their answer.

***To what extent* questions**
Candidates gain marks for considering the impact of a management strategy or strategies they have explored. They should give a brief description of the strategy or project being evaluated, before offering an evidenced conclusion. They do not need to offer an overall opinion based on a variety of strategies, but should assess each separately.

Marking instructions for each question

Section 1 — Global issues

Question			General marking principle for this type of question	Max mark	Specific marking instructions for this question
1.	(a)	(i) and (ii)	Award **1 mark** for each descriptive factor. Award **1 mark** for each explanation. Award **a maximum of 5 marks** for descriptive points. Do not award marks for human factors. Although there could be overlap with factors like cost, this must be clearly linked to the physical environment.	**8**	Points may include: • narrow and deep valleys **(1 D mark)** • costing less for construction materials **(1 E mark)** • narrow valleys also have a reduced surface area **(1 E mark)** • and combined with low temperatures **(1 D mark)** • they reduce water loss from evaporation **(1 E mark)** • if the site has impermeable rock **(1 D mark)** • this would reduce water loss from the reservoir by percolation **(1 E mark)** • a geologically-stable area away from earthquake zones/fault lines **(1 D mark)** • will reduce the risk of damage or failure of the dam **(1 E mark)** • a high drainage density **(1 D mark)** • or high rainfall **(1 D mark)** • will ensure that the reservoir will receive enough water to avoid transfer from adjacent drainage basins. **(1 E mark)** Or any other valid point.

Question			General marking principle for this type of question	Max mark	Specific marking instructions for this question
	(b)		Award **1 mark** for each negative consequence and award further marks where the candidate has developed this. Candidates must include both socio-economic and environmental negative consequences. Award **a maximum of 10 marks** if only one is discussed. Award **2 marks** where candidates give specific named examples within the case study area, which develop the answer. Award **0 marks** where candidates give positive consequences. Award **a maximum of 10 marks** if the answer does not clearly relate to a specific named water management project.	**12**	**For example the Three Gorges Dam, China, negative socio-economic consequences could include:** • the displacement of millions of people from the Yangtze river region **(1 mark)** and hundreds of towns and villages were evacuated and later submerged **(1 mark)** such as Yunyang **(1 EG mark)** • those forced to relocate were promised compensation for the value of their homes and land **(1 mark).** Athough this did not cover the cost of relocation, and some of the money was lost through corruption **(1 mark)** • compensation in some instances has been as little as the equivalent of £5 a month, **(1 mark)** and many claim they have received only half the land compensation they were promised **(1 mark)** • people have been forced to move to more expensive cities and towns **(1 mark)** • the displaced people are mainly farmers with little formal education. This makes it difficult for them to find jobs in the cities and towns **(1 mark)** • farmers remaining in the region have had to migrate northwards on to steeper mountain slopes. **(1 mark)** This increases soil erosion in this area. **(1 mark)** **Negative environmental consequences could include:** • construction of the dam has led to an increase in landslides in the area **(1 mark)** as a result of erosion caused by the increases and decreases in reservoir water **(1 mark)** • the dam has created a barrier in the river and fish are not able to travel upstream to spawn **(1 mark)**, so the populations of the species have decreased **(1 mark)** • the Chinese River Dolphin **(1 EG mark)** is at risk of extinction because the construction area covers a large part of this animal's habitat **(1 mark)** • decreases in freshwater flow have meant that more saltwater is creeping up the Yangtze, **(1 mark)** endangering fish populations already threatened by overfishing. **(1 mark)** Or any other valid point.

Question			General marking principle for this type of question	Max mark	Specific marking instructions for this question
2.	(a)		Credit should be given for explaining why single indicators such a GNI (Gross National Income) are less reliable for a country, or may fail to reflect to true quality of life within the country. **1 mark** should be awarded for each explanation. Care should be taken to avoid crediting reverse points. Credit will also be given to explaining the benefits of a composite indicator.	**6**	• it will prevent extremes within the country from giving a false indication of development **(1 mark)** some oil rich countries are rich but not developed **(1 mark)** • high GNI figures do not show where the money is being spent **(1 mark)** it may not be going to improve health and education **(1 mark)** • single indicators are too broad they are averages which disguise wide internal variations **(1 mark)**. For example, a few immensely wealthy families but the majority of the population may be living at subsistence level **(1 mark)** • some regions/areas of a country may be much better off than others – north-south' or 'urban-rural' contrasts **(1 mark)** • subsistence agriculture and 'barter economies' are not included in wealth indicators **(1 mark)** • certain indicators are perhaps irrelevant to the real quality of life in many poorer developing countries **(1 mark)** • exchange rates fluctuate making comparison unreliable **(1 mark)** • HDI is a combination of health, wealth and education indicators **(1 mark),** as a combination it is a more balanced view of development. **(1 mark)** Or any other valid point.
	(b)	(i) and (ii)	Answers which provide no evaluation should be awarded **a maximum of 8 marks.** Candidates may choose to answer holistically and should be credited accordingly. Award up to **2 marks** for specific named examples.	**14**	Primary Health Care (PHC) Strategies may include: **Oral Rehydration Therapy** is the mixture of salt and sugar with clean water **(1 D mark)** it is very effective as it is cheap for low-income countries **(1 E mark)** and it can be administered by untrained staff. **(1 E mark)** The WHO estimates 1 million babies lives are saved each year from this. **(1 E mark)** **Vaccination programmes** for preventable diseases **(1 D mark)** such as the UNICEF run polio immunisation campaign **(1 EG mark)** were delivered to rural areas as people here find it more difficult to access healthcare **(1 D mark)**. By 2018 polio was endemic in only 2 countries **(1 E mark).**

Question			General marking principle for this type of question	Max mark	Specific marking instructions for this question
			Award **1 mark** for each descriptive point. Award **1 mark** for each evaluative point. Award **a maximum of 8 marks** for any one strategy.		**Charities** such as Water Aid **(1 EG mark)** improve water and sanitation by installing facilities such as pit latrines. **(1 D mark)** The number of people without access to improved drinking water had decreased **(1 E mark)**, and the ash compost from latrines can improve crop yield so malnutrition **(1 E mark)**. **Barefoot Doctors** provide health education and administer basic first aid **(1 D mark)** they can then refer people to local health care centres/hospitals if needed **(1 D mark)**. This is suitable for developing countries as many rural people find it hard to travel to the hospitals which can be many days walk away **(1 E mark)** this takes pressure off the busy hospitals **(1 E mark)** and can treat illnesses earlier before they become more serious **(1 E mark)**. Barefoot doctors also educate through play and songs **(1 D mark)** suitable as some people are illiterate in low-income countries. **(1 E mark)** **Insecticide treated bed nets** provide a physical barrier against the mosquito. **(1 D mark)** However, they need to be treated regularly to be effective **(1 E mark)** and in some cases are used as fishing nets so washes off insecticide. **(1 E mark)** **Play Pumps International (1 EG mark)** provide roundabouts which extract ground water **(1 D mark)** and having only two moving parts use an appropriate level of technology. **(1 E mark)**

Question			General marking principle for this type of question	Max mark	Specific marking instructions for this question
3.	(a)		Award **1 mark** for an impact of climate change. Award further marks for development of each impact. Award up to **2 marks** for specific, appropriate named examples which further develop the answer.	**10**	Possible answers might include: • sea level rises caused by thermal expansion of the oceans **(1 mark)** and also by the melting of glaciers and land-based ice caps **(1 mark)** • low-lying coastal areas will suffer flooding, **(1 mark)** for example, Bangladesh **(1 EG mark)** leading to large-scale displacement of people **(1 mark)** and loss of land for farming and destruction of property **(1 mark)** • climate change refugees moving to higher ground or to other countries **(1 mark)** from areas such as Tuvalu or the Maldives **(1 EG mark)** will exert more pressure on resources such as housing, water and power supplies in the receiving area **(1 mark)** • more extreme and more variable weather such as flooding and droughts, **(1 mark)** and more frequent and intense hurricanes due to increased sea temperatures **(1 mark)** • globally, an increase in precipitation, particularly in the winter in northern countries **(1 mark)** • increase in extent of tropical/vector borne diseases, as warmer areas expand. **(1 mark)** Possibly up to 40 million more people in Africa being exposed to risk of contracting malaria **(1 mark)** • longer growing seasons in many areas in northern Europe**, (1 mark)** increasing food production and range of crops being grown **(1 mark)** • predicted extinction of at least 10% of land species**, (1 mark)** and coral reefs suffer 80% bleaching. **(1 mark)** When water is too warm, corals expel the algae living in their tissues **(1 mark)** causing the coral to turn completely white **(1 marks)** • changes to ocean current circulation may mean the thermohaline circulation starts to lose impact on north–western Europe, resulting in considerably colder winters **(2 marks)** • a more frequent El Niño/La Niña **(1 EG mark)** leads to changes in the monsoon **(1 mark)** • a prolonged dry season can lead to forest fires, **(1 mark)** for example California **(1 EG mark)** • the North-West Passage **(1 EG mark)** will be opened up to ships due to melting sea ice **(1 mark)** meaning more efficient trading routes. **(1 mark)** Or any other valid point.

Question			General marking principle for this type of question	Max mark	Specific marking instructions for this question
	(b)	(i) and (ii)	Award **1 mark** for each descriptive point. Award **1 mark** for each evaluative point. Award **a maximum of 6 marks** for descriptive points. Award up to **2 marks** for specific, appropriate named examples which further develop the answer.	**10**	• the Thames Flood Barrier **(1 EG mark)** is a series of gates which can be raised across the river to prevent sea water flooding London **(1 D mark)** This has successfully protected London from flooding on numerous occasions**. (1 E mark)** However, a second barrier may be needed to cope with flooding beyond 2070 **(1 E mark)** advance warning systems need to be further developed to advise householders of the potential risks of flooding **(1 E mark)** • the UK has implemented hose-pipe bans to reduce water usage in drought periods **(1 D mark)** but these are unpopular and difficult to enforce **(1 E mark)** • a desalination plant has been built in London to provide additional fresh water in drought **(1 D mark)** This uses 100% renewable energy to operate **(1 D mark)** however some feel the money should have been invested in reducing water wastage **(1 E mark)** • Scotland is reducing greenhouse emissions by increasing energy production from renewables **(1 D mark)** which were meeting 70% of the demand by the end of 2019 **(1 E mark)** • individuals can reduce, reuse and recycle products so that less refuse is sent to landfill sites **(1 D mark)**. This will reduce the amount of methane entering the atmosphere **(1 E mark)**. England's recycling rates have increased to 45%. **(1 E mark)** UK recycling rates have increased the fastest in Europe over the past decade **(1 E mark)**. • households could reduce energy consumption by insulating their homes or switching lights off **(1 D mark)** to reduce the amount of carbon dioxide generated by the burning of fossil fuels **(1 D mark)** • people could also be encouraged to use public transport, walk or cycle, or use hybrid or electric cars **(1 D mark)** to cut down on fossil fuel consumption for transport **(1 D mark)** however there is not the necessary infrastructure in place for electric vehicles **(1 E mark)** • fridge disposal should be managed carefully to ensure CFC gases don't escape. **(1 D mark)** New cooling units no longer emit CFCs **(1 D mark)**

Question			General marking principle for this type of question	Max mark	Specific marking instructions for this question
					• government policies such as 'Helping Households to cut their Energy Bills' **(1 EG mark)** or encouraging the use of smart meters **(1 D mark)** improves energy efficiency by showing energy costs in pounds and pence **(1 E mark)**. Many homes however still don't have smart meters as energy companies cannot meet the targets **(1 E mark)**. • the Paris agreement **(1 EG mark)** outlined agreements between leaders of developed and developing countries to limit climate change below a 2ºC rise. **(1 D mark)** Or any other valid point.

Question 4: Energy

Question			General marking principle for this type of question	Max mark	Specific marking instructions for this question
4.	(a)		Candidates must suggest reasons for the differences, award **1 mark** for each reason.	**8**	Reasons may include: • Kuwait generates all its electricity from fossil fuels as it has massive reserves of oil and gas **(1 mark)** • the sub-tropical climate in Paraguay means there is plenty of water for HEP **(1 mark)** • Denmark has a large coastline which allows for an uninterrupted wind flow **(1 mark)** Denmark is also a wealthy country which means it can invest in more expensive wind turbines **(1 mark)** • Kenya is close to the equator allowing for a large amount of sunshine to generate solar energy **(1 mark)** • New Zealand gets a large amount of energy from renewable which includes Geothermal as it is on an active plate margin **(1 mark)** • France has limited fossil fuel reserves and have invested in nuclear energy as a result **(1 mark)** as a peaceful stable country it is feels safe to have nuclear power stations **(1 mark)** • nuclear power allows energy to be produced as and when required **(1 mark)** • having a secure energy supply is important for European countries due to concerns about the reliability and security of importing natural gas from Russia. **(2 marks)**

Question			General marking principle for this type of question	Max mark	Specific marking instructions for this question
	(b)		Award **1 mark** for each reason.	**12**	• most of the global economic growth is happening in middle and low income countries such as China **(1 mark)** • which requires lots of energy to construct infrastructure. **(1 mark),** particularly concrete and steel production **(1 mark)** • population growth is greater in developing countries **(1 mark)** • leading to increased demands for electricity for lighting and appliances **(1 mark)** • the populations of these countries is also getting more wealthy **(1 mark)** • driving consumer demand for more appliances such as fridges and TVs **(1 mark)** • however, these products tend to be less energy efficient when compared to the more expensive options in developed countries **(1 mark)** • car ownership rates have also increased **(1 mark)** • this increases the use of petrol and diesel vehicles **(1 mark)** • much of the economic growth in developing countries is based on energy-hungry manufacturing industries **(1 mark)** • in a global economy many of the manufactured products are sold to developed countries **(1 mark)**, and therefore need to be transported to transit points **(1 mark)** • along with large increase in passenger air travel **(1 mark)** which has led to the construction of a large number of airport terminals and aeroplane use particularly in South East Asia (**1 mark)** • concrete production for urbanisation uses huge amounts of energy **(1 mark)** • energy is required to produce fertilisers and pesticides **(1 mark)** due to increased food production. **(1 mark)**

Section 2 — Application of geographical skills

Question			General marking instructions for this type of question	Max mark	Specific marking instructions for this question
5.	(a) and (b)		Candidates should make reference to all sources, including the Ordnance Survey map, when discussing the suitability of the site and the social, economic and environmental impacts of the development on the surrounding area. Award **1 mark** for each description of the site, or explanation of suitability of the site. Award **1 mark** for each impact, and award a further mark where the candidate develops this. Award **1 mark** where candidates refer to the resource and award further marks where the candidate explains its suitability **(**beyond the wording of the resource**)**. Award up to **4 marks** for map evidence **(**E**)**, which may include correct and appropriate grid references and/or place/road names. It is possible that some points referred to as a disadvantage will be interpreted by other candidates as a negative impact. Award marks for each point only once, where it is best explained.	**20**	Possible advantages of this site may include: • the A1081 **(1 E mark)** has links to junction 10 of the M1 motorway **(1 E mark)** which makes it easy for construction materials to be delivered to the site **(1 mark)** • traffic levels have reduced from a high of 159,000 in 2016 to a low of 133,000 in 2018 **(1 mark)** which means that the road infrastructure should be able to cope with an increase in traffic **(1 mark)** • the area chosen has good accessibility **(1 mark)** which means less access roads need to be built **(1 mark)** • there are no bodies of water so the site will not be at risk of flooding **(1 mark)** • edge of town land may be cheaper**. (1 mark)** Possible disadvantages of this site may include: • the area has sloping land **(1 mark)** as shown by the contour lines at 087187 **(1 E mark)** this would mean there may have to be lots of earthworks to flatten the site **(1 mark)** • the site is restricted by the road infrastructure to the west, south and east **(1 mark)** as well as a golf course at 088192 **(1 E mark)** which means there is no space for future expansion. **(1 mark)** Positive impacts: • the site is around 3km from London Luton Airport **(1 mark)** which could provide international import/export links or a market for the development **(1 mark)** • traffic travelling north on the M1 may provide passing trade for the development **(1 mark)** • Newlands Road provides easy access **(1 E mark)** for workers or customers **(1 mark)** • unemployment is higher in Luton (4.4%) than in eastern England (3.4%) or the UK (3.9%) for March 2019 **(1 mark)** the development can help improve these figures **(1 mark)** • the caravan park at 077192 **(1 E mark)** could provide low-cost accommodation for workers during construction **(1 mark)** • as the site is around 3km from the CBD of Luton people could visit both areas **(1 mark)** aiding the multiplier effect. **(1 mark)**

Question			General marking instructions for this type of question	Max mark	Specific marking instructions for this question
					Negative impacts: • wildlife could be adversely affected by noise and dust during construction **(1 mark)** at Round Wood **(1 E mark)** which is within 1km of the development **(1 mark)** • the growth of crops at Newlands Farm **(1 E mark)** may be stunted by dust during construction**. (1 mark)** Livestock on the farm may also be affected by noise **(1 mark)** • views from the golf course will be impacted meaning there may be fewer people willing to use this course **(1 mark)** and their custom may go to other courses leading to its closure **(1 mark)** • road congestion in surrounding areas may increase**. (1 mark)** B roads such as the B4540 **(1 E mark)** may not be able to cope with large increases **(1 mark)** and journey times may increase. **(1 mark)** Or any other valid point.

[END OF MARKING INSTRUCTIONS]