National Qualifications 2018

2018 Geography

Higher

Finalised Marking Instructions

General marking principles for Higher Geography

This information is provided to help you understand the general principles you must apply when marking candidate responses to questions in this paper. These principles must be read in conjunction with the detailed marking instructions, which identify the key features required in candidate responses.

(a) Marks for each candidate response must **always** be assigned in line with these general marking principles and the detailed marking instructions for this assessment.

(b) Marking should always be positive, ie marks should be awarded for what is correct and not deducted for errors or omissions.

(c) If a specific 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.

(d) Where the candidate violates the rubric of the paper and answers two parts in one section, both responses should be marked and the better mark recorded.

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

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

(g) The detailed marking instructions are not an exhaustive list. Other relevant points should be credited.

(h) For credit to be given, points must relate to the question asked. Where candidates give points of knowledge without specifying the context, these should be rewarded unless it is clear that they do not refer to the context of the question.

(i) For knowledge/understanding marks to be awarded, points must be:
- **a.** relevant to the issue in the question
- **b.** developed (by providing additional detail, exemplification, reasons or evidence)
- **c.** used to respond to the demands of the question (ie evaluate, analyse, etc).

Marking principles for each question type
There are a range of types of question which could be asked within this question paper. For each, the following provides an overview of marking principles, and an example for each.

Explain
Questions which ask candidates to explain or suggest reasons for the cause or impact of something, or require them to refer to causal connections and relationships: candidates must do more than describe to gain credit here.
Where this occurs in a question asking about a landscape feature, candidates should refer to the processes leading to landscape formation.
Where candidates are provided with sources, they 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, no more than half marks should be awarded for the question.
Other questions look for higher-order skills to be demonstrated and will use command words such as analyse, evaluate, to what extent does, discuss.

Analyse
Analysis involves identifying parts, the relationship between them, and their relationships with the whole. It can also involve drawing out and relating implications.
An analysis mark should be awarded where a candidate uses their knowledge and understanding/ a source, to identify relevant components (eg of an idea, theory, argument, etc) 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/interpretations
- possible consequences/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, eg analyse the soil-forming properties which lead to the formation of a gley soil. Candidates would be expected to refer to how the various soil formatting properties contributed to the formation.

Evaluate
Where candidates are asked to evaluate, they should be making a judgement of the success, failure, or impact of something based on criteria. Candidates would be expected to briefly describe the strategy/project being evaluated before offering an evidenced conclusion.

Account for
Where candidates are being asked to account for, they are required to give reasons, often (but not exclusively) from a resource, eg for a change in trade figures, a need for water management, or differences in development between contrasting developing countries.

Discuss
These questions are looking for candidates to explore ideas about a project, or the impact of a change. Candidates will be expected to consider different views on an issue/argument. This might not be a balanced argument, but there should be a range of impacts or ideas within the answer.

To what extent
This asks candidates to consider the impact of a management strategy or strategies they have explored. Candidates would be expected to briefly describe the strategy/project being evaluated before offering an evidenced conclusion. Candidates do not need to offer an overall opinion based on a variety of strategies, but should assess each separately.

Detailed marking instructions for each question

Section 1 Physical Environments

Question			General marking instructions for this type of question	Max mark	Specific marking instructions for this question
1.			Award a **maximum of 3 marks** for any one element. Candidates should identify and discuss processes and their roles. A well annotated diagram could achieve **full marks**.	**4**	• input – precipitation mainly in the form of rainfall and snow, with the amount and duration having an impact on the level of water in the system **(1 mark)** • storage – on the surface in lakes and rivers and interception by leaves and roots of vegetation **(1 mark)**, with water also seeping into the ground, stored as soil moisture in the upper layers or deeper down in rock stores such as the water table **(1 mark)** • transfers – this includes the movement of clouds bearing moisture by the process of advection **(1 mark)** and surface run-off as sheet wash or rivers/tributaries, throughfall and/or stemflow, is responsible for the transferal of precipitation from the canopy to the soil **(1 mark)**, infiltration and/or percolation move water through the soil/rock **(1 mark)**. Throughflow is the movement of water through the upper soil layers towards the river, with the much slower groundwater flow taking longer to enter the river **(1 mark)** • output – evaporation, transpiration from vegetation and surface run-off from rivers into seas and oceans **(1 mark)**. **Or any other valid point.**

Question			General marking instructions for this type of question	Max mark	Specific marking instructions for this question
2.			Award a **maximum of 4 marks** for either feature. Check any diagram(s) for relevant points not present in the text and award accordingly. Well-annotated diagrams that explain conditions and processes can gain **full marks**. Award a **maximum of 1 mark** for three or more correctly named, but undeveloped, processes. Award a **maximum of 2 marks** for fully developed processes for any one feature. Answers which are purely descriptive, or have no mention of any processes or conditions, should achieve no more than **2 marks** in total, with **1 mark** being awarded for every two descriptive points being made.	**7**	**Erosional processes:** • erosion takes place due to hydraulic action — pounding waves compress trapped air in the rocks, creating an explosive blast which weakens and loosens rock fragments **(1 mark)** • abrasion/corrasion — rock fragments thrown against the headland create a sandblasting (abrasive) action, wearing away the rock **(1 mark)** • solution/corrosion — carbonic acid in sea water weathering limestone and chalk **(1 mark)** • attrition — rock fragments slowly being ground down by friction from wave action into smaller and rounder pieces to form sand **(1 mark).** **Headland and bay:** • formed by differential erosion, where softer, less resistant rocks erodes more quickly than harder, resistant rocks **(1 mark)** • a headland is an area of hard rock which juts out into the sea and a bay is a sheltered area of softer rock between headlands **(1 mark)** • often form in areas with a discordant coastline where alternate bands of rock are found at right angles to the coast **(1 mark)** • constructive waves build a small beach in the sheltered bay between the headlands **(1 mark)**. **Wave-cut platform:** • weaknesses such as joints, faults or cracks in cliffs are undercut by erosion to form a wave-cut notch **(1 mark)** • the rock above overhangs over the notch and, as erosion continues, the notch enlarges until the unsupported overhang collapses due to the weight **(1 mark)** • the new cliff face is then eroded and through time, the cliff retreats inland, leaving a gently-sloping rocky surface called a wave-cut platform, which extends out to sea away from the cliff **(1 mark)** • the platform is abraded by rock materials, with rock pools and pot holes forming, evident at low tide **(1 mark)**. **Or any other valid point.**

Question			General marking instructions for this type of question	Max mark	Specific marking instructions for this question
			2 marks The use of the names of at least two processes with development of these, but no other reference to conditions. Or limited use of the names of at least two processes, with at least two descriptive points about the landscape formation. **3 marks** Two developed processes with limited explanation of how the feature forms over time. **4 marks** Two named processes with development of these, with two further statements explaining the formation of the feature. If a candidate chooses a feature not in the question, award marks for relevant processes.		**Depositional processes:** • both the deposition features are caused by the process of longshore drift, where waves, driven by the prevailing wind, push material up the beach; known as the swash **(1 mark)** • the returning backwash is dragged back by gravity down the beach at right angles **(1 mark)**. **Sand bar:** • formed when a spit grows across the entrance to a bay, connecting two headlands, enclosing a sheltered lagoon behind it **(1 mark)** • this happens when there is no strong flow of water from a river into the sea and through time, this stagnant lagoon water is infilled by deposition **(1 mark)** • bars form when there is a change in direction on a coastline, which allows a sheltered area for deposition **(1 mark)**. **Tombolo:** • formed when a spit extends out from the mainland, connecting to an island **(1 mark)**. **Or any other valid point.**

Question			General marking instructions for this type of question	Max mark	Specific marking instructions for this question
3.			'Explain' questions should make reference to causal relationships. Well-annotated diagrams that explain conditions and processes can gain **full marks**. Marks may be awarded as follows: For **1 mark**, candidates may give one detailed explanation. For **1 mark**, candidates may give a limited description with a limited explanation. A **maximum of 2 marks** should be awarded for answers consisting entirely of limited descriptive points, with two such points required for **1 mark**. **Candidates may choose to answer by explaining and relating soil-forming factors or by referring to each horizon in the soil profile.**	**4**	**Possible answers might include:** • natural vegetation — deciduous forest vegetation provides deep leaf litter, which is broken down rapidly in mild/warm climate **(1 mark)** • trees have long roots which penetrate deep into the soil, accessing nutrients from lower layers which are recycled to leaves **(1 mark)** • soil organisms — they ensure the mixing of the soil, aerating it and preventing the formation of distinct layers within the soil **(1 mark)** • climate — precipitation slightly exceeds evaporation, giving downward leaching of the most soluble minerals and the possibility of an iron pan forming, impeding drainage **(1 mark)** • aspect — south-facing slopes in northern hemisphere with a greater amount of sunshine and higher temperatures increase the rate decomposition resulting in humus layer **(1 mark)** • rock type — determines the rate of weathering, with hard rocks such as schist taking longer to weather, producing thinner soils. Softer rocks, such as shale, weather more quickly **(1 mark)** • relief — tend to be found on gentler slopes leading to lower rates of erosions so thicker soils **(1 mark)**. **Or any other valid point.**

Section 2 Human Environments

Question			General marking instructions for this type of question	Max mark	Specific marking instructions for this question
4.			Answers will depend on the case study referenced by the candidate. Marks may be awarded as follows: For **1 mark**, candidates should briefly describe a strategy and offer one evaluative point. Further developed/detailed evaluative comments should be awarded **1 mark** each. At least two strategies are required for full credit. Up to **2 marks** can be awarded for description or explanation of strategies (ie no evaluation), with two such points required for **1 mark**. Credit any other valid responses.	**5**	**Large scale redevelopment:** • the Dharavi Redevelopment Project where local people will be moved to high rise apartment blocks, however, only those who have been resident in Dharavi since 2000 will be eligible to move into these apartments **(1 mark)** • other residents will be moved to other parts of the city, which will break up communities and may result in people being too far from their work **(1 mark)** • the new flats will also however be too small for those who currently have workshops above their homes **(1 mark)**. **Slum Rehabilitation:** • has planned and managed improvements such as upgrading mains sewerage to help reduce diseases such as cholera however, within twelve years, only 15% of Dharavi was redeveloped **(1 mark)**. **Local projects:** • self-help schemes support the efforts of local people to improve their housing for example by adding an additional floor to buildings thus reducing overcrowding **(1 mark)** • toilets have been added and are shared by two or three families who help to keep them clean, which has reduced the incidence of water related diseases **(1 mark)**. **Or any other valid point.**

Question			General marking instructions for this type of question	Max mark	Specific marking instructions for this question
5.			Candidates must explain the problems of collecting accurate population data in developing countries. For **1 mark**, candidates may give one detailed explanation, or a limited explanation of two factors.	**6**	**Problems of gathering population data:** • language barriers — countries with many official languages have to translate their census forms and employ enumerators who can speak multiple languages **(1 mark)** • literacy levels — many people can't read and write, and therefore are unable to complete the forms, or might make mistakes **(1 mark)** • size of the population — the sheer size of some populations make it very difficult to conduct a census, eg in China and India **(1 mark)** • inaccessibility — the poor infrastructure and difficult terrain, for example in the Amazon Rainforest, may make it difficult for enumerators to distribute census forms **(1 mark)** • wars/civil wars — conflict can make it too dangerous for enumerators to enter, or for data to quickly become dated **(1 mark)** • cost — undertaking the census is a very expensive process, even for developed world countries. In developing countries, there may be higher priorities for spending, including housing, education and health care **(1 mark)** • migration — rapid rural to urban migration, can make it difficult to gather accurate population data as data will become outdated very quickly **(1 mark)** • many people in developing countries may be living in shanty towns, eg Dhararvi, or are homeless, so have no official address making it difficult to count them **(1 mark)** • people who are illegal immigrants are unlikely to complete a census for fear of deportation, leading to inaccurate data **(1 mark)** • nomadic people — large numbers of migrants, eg the Tuareg or shifting cultivators in the Amazon can easily be missed or counted twice **(1 mark)** • ethnic tensions and internal political rivalries may lead to inaccuracies, eg northern Nigeria was reported to have inflated its population figures to secure increased political representation **(1 mark)**. **Or any other valid point.**

Question			General marking instructions for this type of question	Max mark	Specific marking instructions for this question
6.			Answers will depend on the case study referenced by the candidate. Marks may be awarded as follows: For **1 mark**, candidates may give one detailed explanation, or a limited description/explanation of two strategies. A **maximum of 2 marks** should be awarded for answers consisting entirely of limited descriptive points, with two points required for **1 mark**.	**4**	**For rainforest areas:** • agro-forestry — farmers grow trees and crops at the same time to reduce large scale deforestation and subsequent soil erosion with protection from the rain/sun **(1 mark)** • the crops benefit from the nutrients from the dead organic matter decomposing adding to the fertility of soil **(1 mark)** • selective logging — trees are only felled when they reach a particular height. This allows young trees a guaranteed life span thus protecting the soil from erosion **(1 mark)** • afforestation projects reduce wind erosion and prevent soil erosion as the tree roots bind the soil and hold it in place **(1 mark)** • forest reserves — areas protected from exploitation, purchased by conservation groups or the government, allowing indigenous people to practice shifting cultivation which is less destructive of soil **(1 mark)** • monitoring — use of satellite technology and photography to check that any activities taking place are legal and follow guidelines for sustainability reduced deforestation by 60% in Brazil **(1 mark)**. **Suitable methods for a semi-arid area may include:** • afforestation projects reduce wind erosion and prevent soil erosion as the tree roots bind the soil and hold it in place **(1 mark)** • Fanya juu terraces (popular in Makanya in north-eastern Tanzania) have been made by digging a drainage channel and throwing soil uphill to make a ridge to increase infiltration **(1 mark)** • Diguettes or 'Magic Stones' are lines of stones placed along the contours of gently sloping land to trap rain water as well as soil **(1 mark)** • moveable fencing allows farmers to control grazing area allowing soil to recover at different times of the year **(1 mark)** • Zai (microbasins, or planting pits) are hollows dug to retain moisture and nutrients which increases infiltration/reduces run-off **(1 mark)**. **Or any other valid point.**

Section 3 Global Issues

Question			General marking instructions for this type of question	Max mark	Specific marking instructions for this question
7.	(a)		**1 mark** should be awarded for each detailed explanation. A **maximum of 2 marks** should be awarded for answers consisting entirely of limited descriptive points, with two points required for **1 mark**. Markers should take care not to credit physical factors. Although there could be overlap with factors like cost and cross-section, this must be clearly linked to human factors.	**4**	• to reduce construction costs for the dam a narrow cross section of the valley could be chosen **(1 mark)** • a site which is close to construction materials would help to reduce the cost of transporting these materials to the construction site **(1 mark)** • a site close to areas of farmland or urban areas would help to reduce water/electrical loss during transportation **(1 mark)** • an area of low population to reduce the costs for compensation and re-housing people who live in the area to be flooded **(1 mark)** • there is a need to be sensitive to native cultures for example many sites of archaeological importance in the Three Gorges Dam area were flooded or had to be relocated **(1 mark)**, or areas where there are important environmental considerations to avoid protests over concerns re the site of the dam • care has to be taken to avoid impacts on communication networks like road or rail links **(1 mark)** • workers will be needed therefore the distance to a nearby urban area to allow workers to commute easily needs to be considered **(1 mark)**. **Or any other valid point.**

Question			General marking instructions for this type of question	Max mark	Specific marking instructions for this question
	(b)		Award **1 mark** for each detailed explanation. For **full marks**, candidate answers must include both socio-economic and environmental benefits. No marks should be awarded for negative impacts. Award a **maximum of 5 marks** if the answer does not clearly relate to a specific named water management project. A **maximum of 3 marks** should be awarded for answers consisting entirely of limited descriptive points, with two such points required for **1 mark**.	**6**	**Answers will depend on the water management project chosen.** **For the Aswan High Dam, possible answers might include:** • increased access to clean drinking water reduces water borne diseases such as typhoid **(1 mark)** • increased irrigation, which allows for two crops a year to be grown, reducing malnutrition **(1 mark)** • production of wheat and sugar cane tripled allowing more export crops to be produced **(1 mark)** • increase in hydro-electric power attracting industries such as smelting industries **(1 mark)** • the introduction of the Nile perch and tiger fish into Lake Nasser has increased the income from commercial fishing industry and fishing tourism industry **(1 mark)** • industries which require large amounts of water have grown up near to Aswan, for example fertilisers, which creates jobs and generated foreign income **(1 mark)** • Lake Nasser provides a sanctuary for waterfowl and wading birds and has more than 32 species of fish **(1 mark)** • increase in 'clean' energy from the Dam, instead of using polluting fossil fuels reducing emissions which contribute to climate change **(1 mark)**. **Or any other valid point.**

Question			General marking instructions for this type of question	Max mark	Specific marking instructions for this question
8.	(a)		**1 mark** should be awarded for each detailed explanation, or for two more straightforward explanations. A **maximum of 2 marks** should be awarded for answers consisting entirely of limited descriptive points, with two points required for **1 mark**. Both positive and negative development factors can be awarded marks, but markers should take care to avoid crediting direct reversals.	**5**	• some countries such as Saudi Arabia have natural resources such as oil, which can be sold to generate foreign currency **(1 mark)** • some countries are landlocked and find it more expensive to export and import goods **(1 mark)** • a very hot and dry climate, which can cause desertification, makes it very difficult to grow crops to feed the population **(1 mark)** • some countries have beautiful beaches and scenery, which attracts tourists creating job opportunities **(1 mark)** • countries with a poor education system have many low skilled workers and are unable to attract foreign investment **(1 mark)** • corruption in government such as in Nigeria can lead to money being used inappropriately for military purposes **(1 mark)** • the lack of strict pollution laws in parts of SE Asia has also made some countries more attractive for manufacturing industries **(1 mark)** • where countries suffer from conflict or civil war they are unable to keep the economy working and spend extra finance on weapons **(1 mark)** • many countries suffer natural disasters which destroy infrastructure and wipe out efforts for development for example hurricanes in the Caribbean **(1 mark)** • countries which have accumulated large debts have to repay loans and interest causing less money for services **(1 mark)** • famine can lead to malnutrition, and a reduced capacity to work and create income **(1 mark)**. **Or any other valid point.**

Question			General marking instructions for this type of question	Max mark	Specific marking instructions for this question
	(b)		**1 mark** should be awarded for each description of a strategy with a limited evaluation. **1 mark** should be awarded for each developed evaluation or for two less developed evaluations. A **maximum of 2 marks** should be awarded for answers consisting entirely of limited descriptive points, with two points required for **1 mark**. Candidate may discuss malaria in this question however only strategies which could be considered PHC should be credited. A **maximum of 4 marks** can be awarded for any one strategy.	**5**	**Possible answers might include:** **Barefoot doctors** have been particularly effective because: • individuals were chosen by each village to be trained to a basic level of health care and so were fully trusted by the community **(1 mark)** • in countries with large rural areas it is very difficult to ensure that every village has access to a fully trained doctor/hospital **(1 mark)**. **The use of Oral Rehydration Therapy (ORT)** has been particularly effective because: • it is an easy, cheap and effective method of treating dehydration through diarrhoea — allowing even the poorest developing country to tackle this health problem **(1 mark)** • the World Health Organization estimates that ORT saves about 1 million babies each year in developing countries **(1 mark)**. **Organised Health Education Programmes** have been effective because: • they educate people about how to prevent diseases spreading for example by the use of mosquito nets to prevent malaria **(1 mark)** • preventative healthcare such as vaccinations is easier and more cost-effective than trying to cure someone once they have a disease **(1 mark)** • the use of village meetings, songs, plays and posters to pass on health education messages are particularly effective in places with an illiterate population where a written leaflet would be of limited use **(1 mark)** • vaccination Programmes to immunise against preventable diseases like polio, cholera, measles, tetanus etc are estimated by the World Health Organization to save between 2 and 3 million lives every year **(1 mark)**.

Question			General marking instructions for this type of question	Max mark	Specific marking instructions for this question
					Small-scale health projects (such as pit latrines) can be effective because they: • use local labour and building materials for these projects reduces the cost and are readily available **(1 mark)** • they also provide the locals with training and transferable skills, which can help them to improve their standard of living in other ways **(1 mark)** • using local facilitators also ensures that the projects gain faster acceptance and usage in the local and wider community **(1 mark)**. **Or any other valid point.**

Question			General marking instructions for this type of question	Max mark	Specific marking instructions for this question
9.	(a)		For **1 mark**, candidates should give one detailed response, or a limited description of two factors. A **maximum of 3 marks** should be awarded for answers consisting entirely of limited descriptive points, with two such points required for **1 mark**. Candidates should be credited for both positive and negative impacts. Credit any other valid responses.	**5**	• sea level rises, caused by an expansion of the sea as it becomes warmer and also by the melting of glaciers and ice caps in Greenland, Antarctica, etc **(1 mark)** • low-lying coastal areas, eg Bangladesh, affected with large-scale displacement of people and loss of land for farming and destruction of property **(1 mark)** • more extreme and more variable weather, including floods, droughts, hurricanes and tornadoes becoming more frequent and intense **(1 mark)** • globally, an increase in precipitation, particularly in the winter in northern countries such as Scotland, but some areas like the USA Great Plains may experience drier conditions **(1 mark)** • increase in extent of tropical/vector borne diseases, eg yellow fever, as warmer areas expand, possibly up to 40 million more in Africa being exposed to risk of contracting malaria **(1 mark)** • longer growing seasons in many areas in northern Europe for example, increasing food production and range of crops being grown **(1 mark)** • habitat loss has largest impact on indigenous animals/plants, and in areas where migration to new habitats is more difficult, leading to estimates of 10% extinction rates for land species **(1 mark)** • increased sea temperatures have led to 80% coral bleaching. Extended periods of bleaching can kill the coral with knock on effects for other marine life **(1 mark)** • changes to ocean current circulation, eg in the Atlantic the thermohaline circulation starts to lose impact on north-western Europe, resulting in considerably colder winters **(1 mark)** • changes in atmospheric patterns linking to changes in the monsoon caused by El Niño and La Niña **(1 mark)** • increased risk of forest fires, for example in Australia and California due to change in surface temperatures and changes in rainfall patterns **(1 mark)**. **Or any other valid point.**

Question			General marking instructions for this type of question	Max mark	Specific marking instructions for this question
	(b)		For **1 mark**, candidates should give one detailed explanation of the strategies used to manage climate change, or a limited description/explanation of two strategies. Credit any other valid responses.	**5**	• individuals can reduce, reuse and recycle products so that less refuse is sent to landfill sites. This will reduce the amount of methane entering the atmosphere **(1 mark)** • to reduce the amount of carbon dioxide generated by the burning of fossil fuels, households could reduce energy consumption by insulating their homes or switching lights off **(1 mark)** • people could also be encouraged to use public transport, walk or cycle, or use hybrid or electric cars to cut down on fossil fuel consumption **(1 mark)** • fridge disposal should be managed carefully to ensure CFC gases don't escape. New cooling units no longer emit CFCs **(1 mark)** • Government Policies such as 'Helping Households to cut their Energy Bills' encourages the use of 'Smart Meters' improving energy efficiency by showing energy costs in pounds and pence **(1 mark)** • increasing the use of low carbon technologies such as windfarms – the UK Government is committed to creating 15% of energy by renewable sources by 2020 **(1 mark)** • UK government is committed to banning the sale of new petrol/diesel cars by 2040 to reduce emissions **(1 mark)** • the Paris agreement outlined agreements between leaders of developed and developing countries to limit climate change below a 2^0C rise **(1 mark)** • the impact of climate change could also be managed by preparing for extreme weather events, for example, flood defences could be built to hold back flood water, or flood plains and natural wetlands could be used to store flood water **(1 mark)**. **Or any other valid point.**

Question			General marking instructions for this type of question	Max mark	Specific marking instructions for this question
10.	(a)		**1 mark** should be awarded for each detailed explanation or comparison. A **maximum of 2 marks** should be awarded for answers which are purely descriptive and do not go beyond making comparisons directly from the graph, with two such comparisons required for **1 mark**. Markers should take care to look for comparisons wherever they occur in a candidate's answer.	**4**	**Possible answers might include:** • developing countries such as those in Africa often sell primary products at low value, therefore profits are limited **(1 mark)** • developing countries in Africa are often disproportionally affected by natural disasters such as drought as they often rely on one or two primary goods **(1 mark)** • however, developed countries manufacture products, which adds value and provides increased profits **(1 mark)** • developing countries are deterred from exporting processed coffee as high import taxes would be placed on the coffee **(1 mark)** • patterns established during colonial times have been difficult to break which may account for the higher % of trade attributed to Europe **(1 mark)** • developed countries set the prices for raw materials through trading on commodity exchanges around the world, eg the New York Mercantile Exchange **(1 mark)** • many countries are unable to make a decent profit on the goods they sell because they are forced to pay tariffs to developed countries in trading blocs **(1 mark)**.

Question			General marking instructions for this type of question	Max mark	Specific marking instructions for this question
	(b)		**1 mark** should be awarded for each developed point. A developed point may be a detailed explanation, or a description with a less detailed explanation, or may be two less detailed explanations. For **full marks**, candidate answers must include both socio-economic and environmental benefits. Credit any other valid responses.	**6**	**Socio-economic impacts:** • people being trapped in poverty and trying to survive on very little money. This might be because companies in the developed world want to manufacture their product for the cheapest price possible **(1 mark)** • government subsidies and grants in developed countries allow companies to sell products (e.g rice and grain) at a cheaper price than is possible in many developing countries, undercutting local farmers and causing them to lose money **(1 mark)** • with little money they cannot afford things such as primary education for children. Many children are required to work to help the family earn a living instead of going to school **(1 mark)** • this causes an illiterate population, with the consequent lack of opportunities and poorer quality of living for people that this applies to **(1 mark)** • creates a cycle of poverty where the next generation are unable to access well paid employment due to being illiterate **(1 mark)** • the lack of well-paid jobs means many people live in shanty town type accommodation, with little access to clean water, safe electricity, sanitation etc **(1 mark)** • if a multinational company was to locate in a country this may improve the skills and education of local people increasing their standard of living **(1 mark)**. **Environmental Impacts:** • natural resources being over exploited which can lead to land degradation which can further reduce countries' ability to improve agriculture **(1 mark)** • to the extraction of palm oil in Indonesia has resulted in damage to the environment. More than 40 million hectares of rainforest has been lost. **(1 mark)** • extracting resources leads to increased CO^2 emissions leading to an increase of greenhouse gases and global warming/climate change **(1 mark)**.

Question			General marking instructions for this type of question	Max mark	Specific marking instructions for this question
11.	(a)		**1 mark** should be awarded for each developed point for energy production or for two undeveloped points. A developed point may include a descriptive statistic/comparative statement with explanation or a developed explanation. Where candidates have only described the data, award a **maximum of 1 mark**. **1 mark** should be awarded for two descriptive points. Credit any other valid responses.	**5**	**Possible answers might include:** • Saudi Arabia is able to produce 569 million tonnes of oil a year due to vast natural resources of oil in its territory so it doesn't need to invest in other forms of energy **(1 mark)** • Brazil has the largest amount of Hydroelectric Power because it has large amounts of tropical precipitation and major rivers that can be harnessed **(1 mark)** • China and Brazil have invested heavily in large scale hydroelectric schemes in order to generate energy to prevent having to import oil and gas **(1 mark)** • the USA is able to produce large quantities of gas due to investment in techniques such as fracking which allows gas to be taken from deep underground **(1 mark)** • this allows the USA to export large quantities of gas but also it is consumed within the country so that it is not reliant on oil from other countries **(1 mark)** • Kazakhstan is able to produce large amounts of Nuclear power as it has large reservoirs of uranium, it has 12% of the world's reservoirs **(1 mark)** • Kazakhstan has electricity grid links to Russia, Kyrgyzstan and Uzbekistan and is also planning links to China, this means energy can be sold abroad to boost income **(1 mark)**.

Question			General marking instructions for this type of question	Max mark	Specific marking instructions for this question
	(b)		Award **1 mark** for each developed advantage or disadvantage or for every two undeveloped points. Candidates must discuss advantages and disadvantages to gain full credit. Candidates must discuss a non-renewable source of energy. No marks for discussing renewable sources of energy. Candidates are expected to consider different aspects of their chosen source of energy. Credit any other valid responses.	**5**	**Possible answers might include:** • non-renewable energy provides instant power as required meeting demand at peak times such as early evening **(1 mark)** • non-renewable energy can cause pollution and may release greenhouse gases so contribute towards global warming **(1 mark)**. **For 'fracking' other possible answers could include:** • the shale gas provides an alternative energy source reducing reliance on traditional fossil fuels, such as oil, which are finite **(1 mark)** • noise and light pollution is increased due to 24hr production on shale gas sites **(1 mark)** • in USA shale gas production has allowed it to become self-sufficient in gas and means it does not have to rely on imports from other countries **(1 mark)** • however, the fracking fluid used in the process could pollute ground water and enter the domestic water system **(1 mark)** • the fracking process could be linked to causing minor earthquakes and tremors in the local area leading to building damage **(1 mark)**.

Section 4 Application of Geographical Skills

Question			General marking instructions for this type of question	Max mark	Specific marking instructions for this question
12.			Candidates should make reference to all sources, including the OS map to discuss the impact of the High speed train line. **1 mark** should be awarded where candidates refer to the resource and offer a brief explanation of its significance, or give a limited description/explanation of two factors. A **maximum of 5 marks** should be awarded for answers consisting solely of limited descriptive points with two such points required for **1 mark**. A **maximum of 4 marks** should be awarded for candidates who give vague over-generalised answers, which make no reference to the map. There are a variety of ways for candidates to give map evidence including descriptions, grid references and place names. Credit any other valid responses.	**10**	**Advantages of Route:** • the HS2 line uses a section of disused railway in grid squares (2576 & 2577) which will reduce costs and disruption **(1 mark)** • the land is generally very flat thereby reducing costs while it is urbanised therefore reducing the visual impact **(1 mark)** • the route avoids areas of housing thereby reducing the impact on families and cost of relocation/compensation **(1 mark)**. **Disadvantages of Route:** • the route crosses many main roads and motorways such as the M6 & M42, this will increase the cost of the line as many bridges/tunnels will be required **(1 mark)** • the railway has to cross a number of waterways such as the River Blyth which will increase costs for drainage **(1 mark)**. **Positive Impacts:** • reduction in travel time from London to Birmingham will allow more business to take place between the two cities and will therefore increase jobs and the economy **(1 mark)** • the train line will create many jobs and generate money for the economy, by bringing in more international companies **(1 mark)** • Birmingham international airport will be able to do more business as it is connected to London via the high speed train line **(1 mark)** • the interchange train station is close to the national exhibition centre (NEC) which will allow more people to travel to the shows there and therefore encourage more trade and sales **(1 mark)** • however, the NEC is on the other side of the M42 which will make it difficult to get there from the train station **(1 mark)** • in future years phase 2 will link to Manchester and Leeds bringing even more business to the area **(1 mark)**

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					• more expensive commuter areas like Balsall Common have far more concerns with over 160 in relation to noise pollution as this area is more rural **(1 mark)** • noise is less of a concern for the people of Chelsmey Wood – this may be because the area is next to the airport so the people are more used to the increased noise levels **(1 mark)**. **Negative Impacts:** • Birmingham international airport may lose passengers to the high speed railway as the journey time is cut and it takes passengers into the city centre **(1 mark)** • a large number of people, approx. 152 in the Hampton/Balsall area, are worried about the visual impact as the line travels through open area/countryside ie grid square (2181) **(1 mark)** • the noise and vibrations from the line and it construction would be a negative particularly for people living in the more residential areas of Hampton in Arden and Balsall Common **(1 mark)** • a number of farms will lose land to the construction of the rail line having a negative impact on their ability to keep enough livestock/crops to be profitable **(1 mark)**, while other farms such as Pasture farm (208 828) will completely disappear meaning farmers losing their way of life **(1 mark)** • the biggest concern from those in Chelmsley Wood is in relation to transport and traffic as the line crosses a number of main road networks including the M6 and M42, the construction of the line would cause severe traffic issues as bridges or tunnels are constructed **(1 mark)**. **Or any other valid point.**

[END OF MARKING INSTRUCTIONS]