National
Qualifications
2025

2025 Geography

Physical and Human Environments

Higher

Question Paper Finalised Marking Instructions

These marking instructions have been prepared by examination teams for use by SQA appointed markers when marking external course assessments.

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 — Physical Environments

Question			General marking instructions for this type of question	Max mark	Specific marking instructions for this question
1.			Check any diagram(s) for relevant points not present in the text and award marks accordingly. Candidates can gain full marks for well-annotated diagrams that explain the formation of an arête. Award **a maximum of 6 marks** where candidates provide fully developed processes (up to **2 marks** per developed process). Award **1 mark** for each named process, where a basic explanation has been given. An additional mark can be awarded for further development. Award **a maximum of 1 mark** where candidates provide a list of unexplained processes with at least two processes required for this mark. Award **a maximum of 2 marks** for the formation of a glacier. Award **a maximum of 1 mark** for a correctly named example of an arête. Award **a maximum of 9 marks** for answers which do not develop past the development of a corrie.	**10**	Points may include: **Glacier formation includes**: • snow accumulates in north facing hollows **(1 mark)** when more snow falls in winter than melts in the summer **(1 mark)** • north/north-east facing slopes are more shaded so snow lies longer **(1 mark)** with accumulated snow compressed into névé/glacial ice **(1 mark)** **Processes include**: • plucking — when ice freezes on to bedrock **(1 P mark)** pulling loose rocks away from the backwall **(1 P mark)** • abrasion — when the angular rock embedded in the ice **(1 P mark)** grinds the hollow as the glacier moves **(1 P mark)** • frost shattering/freeze thaw weathering — when water in cracks in the rock freezes **(1 P mark)**, expands and contracts weakening the rock until fragments break off **(1 P mark)** **Arête:** • glacier moves downhill due to gravity/weight **(1 mark)** • a bergschrund crevasse may open up at the back of the hollow **(1 mark)** • this allows meltwater and rock fragments to get to the base of the glacier increasing erosive power **(1 mark)** • rotational sliding over deepens the hollow **(1 mark)** • an arête is formed when two corries erode back towards each other **(1 mark)** • frost shattering can make the ridge more pronounced **(1 mark)**, and can cause scree slopes to develop **(1 mark)** • an example of an arête is Striding Edge **(1 EG mark)** **Or any other valid point.**

Question			General marking instructions for this type of question	Max mark	Specific marking instructions for this question
2.			Check any diagram(s) for relevant points not present in the text and award marks accordingly. Candidates can gain full marks for well-annotated diagrams that explain the formation of headlands and bays. Award **a maximum of 2 marks** where candidates provide a list of unexplained processes with at least two processes required for each mark. Award **a maximum of 6 marks** where candidates provide fully developed processes (up to **2 marks** per developed process). Award **1 mark** for each named process, where a basic explanation has been given. An additional mark can be awarded for further development. Award **a maximum of 1 mark** for a correctly named example of a headland **or** bay.	**10**	Points may include: **Coastal erosion processes:** • hydraulic action — pounding waves compress trapped air **(1 P mark)** in the rocks creating an explosive blast which weakens and loosens rock fragments **(1 P mark)** • abrasion/corrasion — rock fragments thrown against the headland **(1 P mark)** breaking down the cliff face, grinding/scraping the rock **(1 P mark)** • solution/corrosion — carbonic acid/salts in sea water **(1 P mark)** dissolves rock **(1 P mark)** • attrition — rock fragments slowly being ground down by friction **(1 P mark)** from wave action into smaller and rounder pieces which can then be used as an abrasive material **(1 P mark)** **Headland and Bay:** • headlands and bays are found where there are alternate bands of hard and soft rock **(1 mark)** such as chalk (hard rock) and clay (soft) **(1 mark)** • a discordant coastline/where the bands are found at right angles to the coast **(1 mark)** • a concordant coastline/where these bands are found parallel to the coast **(1 mark)** • softer rock is eroded faster than harder rock/differential erosion **(1 mark)** • this results in the headland jutting out into the sea with bays between them (**1 mark)** • constructive waves build sandy beaches in sheltered bays **(1 mark)** • a named example is Swanage Bay **(1 EG mark)** **Or any other valid point.**

Question			General marking instructions for this type of question	Max mark	Specific marking instructions for this question
3.			A fully annotated diagram could achieve full marks. Award **1 mark** for each process/stage where a basic understanding is demonstrated. Additional marks can be awarded for further development.	**8**	Points may include: • the main input is precipitation through eg rain and snow **(1 mark)** • water vapour can be evaporated by the heat from the sun **(1 mark)** • when water vapour is lost to the atmosphere from vegetation it is called transpiration **(1 mark)** • advection moves clouds/water vapour inland **(1 mark)** • water vapour in the atmosphere can cool and condense into clouds **(1 mark)** • this will form clouds which when big enough produce precipitation **(1 mark)** • rainwater can be intercepted by vegetation slowing down the movement of water **(1 mark)** • it may also be stored on the surface in different volumes in puddles/lakes/glaciers **(1 mark)** • water may move over the surface or the land as rivers/sheet wash **(1 mark)**, or flow into the soil in a process called infiltration **(1 mark)** • water can move downhill through the soil, which is called throughflow **(1 mark)** • water may then percolate into the rocks below the soil **(1 mark)** • it can then flow through the rocks as groundwater flow **(1 mark)** or be stored in the rocks as groundwater storage **(1 mark)** • the water table marks the level below which the ground water is saturated **(1 mark)** **Or any other valid point.**

Question			General marking instructions for this type of question	Max mark	Specific marking instructions for this question
4.			Award **1 mark** for each basic explanation. An additional mark can be awarded for further development.	**8**	Points may include: • low temperatures lead to slow decomposition **(1 mark)** • coniferous needles and cones produce acidic (mor) humus **(1 mark)** • high precipitation leads to leaching **(1 mark)** which is the downward movement of the aluminium and iron oxides **(1 mark)** this leads to the formation of an iron pan between the A/B horizons **(1 mark)** • this iron pan may impede drainage causing water logging **(1 mark)** • eluviation leaves an ash grey A horizon **(1 mark)** • illuviation leads to a reddish brown or yellowish-brown B horizon **(1 mark)** • low temperatures lead to limited biota **(1 mark)** • limited soil biota leads to well defined horizons **(1 mark)** • limited biota contributes to slower soil formation **(1 mark)** • less burrowing and tunnelling can encourage waterlogging **(1 mark)** • found on steep slopes this further encourages leaching **(1 mark)** • shallow roots mean limited absorption of deep leached minerals **(1 mark)** • shallow roots also mean limited nutrient recycling **(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.	(a)		Award **a maximum of 3 marks** for each air mass. For each air mass: Award **1 mark** where candidates provide the origin Award up to **2 marks** for any weather characteristics. Do not award marks for origin over sea (X) or land (Y).	**6**	**Maritime tropical (mT):** • origin — Atlantic Ocean/Gulf of Guinea **(1 mark)** • weather characteristics — warm/hot **(1 mark)**, unstable air **(1 mark)** with high humidity **(1 mark)**, high precipitation **(1 mark)** **Continental tropical (cT):** • origin — Sahara Desert **(1 mark)** • weather characteristics — hot/hotter/very hot **(1 mark)**, low precipitation **(1 mark)**, and stable air **(1 mark)** with low humidity **(1 mark)** poor visibility **(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)	(i) and (ii)	Award **a maximum of 5 marks** for either description or explanation. Award **1 description mark** for each comparison. Candidates should highlight the marked contrast in precipitation totals, and seasonal distribution. Candidates may answer each command separately or as a holistic answer. Award marks accordingly.	**8**	**Descriptions may include:** • the north is very dry with a much wetter south **(1a mark)**. Agadez has a much lower annual rainfall amount of 110mm compared to Port Harcourt which has 2260mm a year on average **(1a mark)** • Abuja has a clear wet/dry season regime whereas Port Harcourt has year-round rainfall **(1a mark)**. Agadez has 6 months with no rainfall, whereas Abuja has only 2 months with no rainfall **(1a mark)** • Port Harcourt has a twin-peak regime whereas the other areas have only one peak **(1a mark)** • Port Harcourt peak rainfall is in June, whereas it is August in Abuja and Agadez **(1a mark)** • Port Harcourt has a peak of 360mm whereas Agadez's peak is 50mm **(1a mark)** **Explanations** should focus on the role of the intertropical convergence zone (ITCZ) and the movement of the Maritime Tropical (mT) and Continental Tropical (cT) air masses over the course of the year: • the ITCZ is an area of low pressure where the trade winds/air masses meet **(1b mark)** pushing the maritime air up, cooling and condensing to form clouds **(1b mark)** • the twin precipitation peaks can be attributed to the ITCZ moving northwards in the early part of the year and then southwards later in the year **(1b mark)** in line with the thermal equator/overhead sun **(1b mark)** • Port Harcourt on the coast is influenced by the wet mT air for most of the year **(1b mark)**. Agadez, on the other hand, is under the influence of the dry cT air for most of the year **(1b 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
6.			Award **1 mark** for each relevant point.	**6**	**Points may include:** • a census is a survey carried out every 10 years **(1 mark)** • each householder is asked to complete a detailed questionnaire about the number of people living in their home/social, economic, cultural background **(1 mark)** • a census is a legal requirement/householders may be fined for non-completion **(1 mark)** • civil registration of births and deaths **(1 mark)** provide an up-to-date count between censuses **(1 mark)** • the Scottish Household Survey is a continuous survey **(1 mark)** based on a random sample of the population **(1 mark)** which is cheaper than carrying out a full census **(1 mark)** • governments also collect data on migration, eg visa applications **(1 mark)** and NHS records provide health data **(1 mark)** **Or any other valid point.**

Question			General marking instructions for this type of question	Max mark	Specific marking instructions for this question
7.			Award **1 mark** for each explanation. Named examples will enhance a candidate's answer, with **a maximum of 2 marks** for relevant examples.	**12**	• countries with many official languages have to translate their census forms **(1 mark)** eg India **(1 EG mark)** and employ enumerators who can speak multiple languages **(1 mark)** • many people can't read and write and therefore are unable to complete the forms **(1 mark)** or might make mistakes unintentionally leading to inaccuracy **(1 mark)** • the poor infrastructure and difficult terrain **(1 mark)**, eg in the Amazon Rainforest **(1 EG mark)**, may make it difficult for enumerators to distribute census forms **(1 mark)** • conflict can make it too dangerous for enumerators to enter parts of a country **(1 mark)**, or for data to quickly become dated due to increased deaths/migration **(1 mark)** • undertaking a census is a very expensive process **(1 mark).** In developing countries, there may be higher priorities for spending, including housing **(1 mark)** • rapid rural to urban migration can make it difficult as data will become outdated very quickly **(1 mark)** • many people in developing countries may be living in informal housing, so have no official address making it difficult to count them **(1 mark)** eg Dharavi **(1 EG mark)** • people who are illegal immigrants are unlikely to complete a census for fear of deportation **(1 mark)** • Nomads/shifting cultivators can be easily missed or counted twice **(1 mark)** eg, the Tuareg/Fulani/Bedouin **(1 mark)** • ethnic tensions and internal political rivalries may lead to inaccuracies **(1 mark)**, eg northern Nigeria **(1 EG mark)** was reported to have inflated its population figures to secure increased political representation/gain a greater share of government funding **(1 mark)** • lack of civil registration, due to lack of access to registration, results in some births not being registered **(1 mark)** In Malawi birth registration is optional **(1 EG mark)** **Or any other valid point.**

Question			General marking instructions for this type of question	Max mark	Specific marking instructions for this question
8.			Award **1 mark** for each relevant point. Award **a maximum of 5 marks** where candidates give generic answers which do not refer to a specific case study.	**6**	**For Mexico to USA Migration, possible answers might include:** **Impacts on donor country:** • migrants send money home to families which helps to improve living standards **(1 mark).** Mexico received over $633bn billion in remittances in 2023 **(1 mark)** • there will be reduced pressure on healthcare and housing in towns that many people have moved away from' **(1 mark)** • Migrant workers who return may bring back skills they have learned which can benefit the area **(1 mark)** • Mexico experiences the 'brain drain' where economically active and skilled people leave **(1 mark)** • majority of migrants are adult males/fathers which leaves behind divided families **(1 mark)** • younger people tend to migrate which leaves behind a large number of elderly dependents with no one to look after them **(1 mark)** • many migrants die attempting to unlawfully cross the border due to the intense heat of the desert/drowning in the Rio Grande/falling from barriers **(1 mark).** Over 600 migrants died trying to cross the U.S-Mexico border unlawfully in 2022 **(1 mark)** **Impacts on receiving country:** • the government receives increased tax from migrant workers **(1 mark)** who are doing jobs that some American people are unwilling to do due to low wages and unsociable hours **(1 mark)** • the sunbelt states are thriving as businesses utilise cheaper labour and increased profits **(1 mark)** • In 2023 there were 5 million Hispanic owned companies throughout the USA **(1 mark)** which contribute more than $800 billion to the American economy **(1 mark)** • Increased migration has led to a multicultural society influencing food/drink/language **(1 mark)** • the language barriers and cultural differences can lead to racial tension **(1 mark)** and ghettos with ethnic groups tending not to integrate which can add to the conflict **(1 mark)** • the education system may become strained **(1 mark)** due to the number of children for whom English is not their first language **(1 mark)**

Question			General marking instructions for this type of question	Max mark	Specific marking instructions for this question
					• illegal immigration costs the USA millions of dollars for border patrols **(1 mark)**. Texas has spent over $11 billion on 'Operation Lone Star' since 2021 **(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) and (b)		Award **1 mark** for each description or explanation. Award **a maximum of 5 marks** for description, including **a maximum of 1 mark** for a named example of a strategy. Candidates must include description and explanation for full marks. Where candidates give generic answers, which do not refer to a specific case study, award **a maximum of 7 marks**.	**8**	**For candidates who have studied Dharavi, possible answers might include:** **Large scale redevelopment:** • whole scale demolition of informal housing **(1a mark)**, which are replaced by modern high rise apartment blocks with water, sewerage and electricity **(1a mark)** eg The Dharavi Redevelopment Project **(1 EG mark)** • homes have been given formal addresses and people will be registered with city authorities **(1a mark)** so that the council can collect taxes in order to provide services **(1b mark)** • planned roads are paved and widened **(1a mark)** to allow access for waste management services which improves the environment **(1b mark)** • industrial areas will be separated from residential areas **(1a mark)** which means people are not living close to hazardous materials **(1b mark)** **Slum Rehabilitation Authority (1 EG mark):** • this has planned and managed improvements such as upgrading mains sewerage **(1a mark)** to help reduce diseases such as cholera **(1b mark).** This leads to improved health/quality of life for residents **(1b mark) e**g 'Slum Sanitation Project' **(1 EG mark)** **Local projects:** • self-help schemes support the efforts of local people to improve their housing **(1a mark)** for example by adding an additional floor to buildings to reduce overcrowding **(1b mark)** • a motorized rickshaw that carries buckets of slow-setting concrete allows residents to add to their homes **(1a mark)**, to create more spacious, stronger and safer houses **(1b mark)** • toilets have been added and are shared by two or three families who help to keep them clean **(1a mark).** 'Suvidha Centre Toilets' **(1 EG mark)** was opened in 2022 and also offers washing/cleaning facilities and fresh water facilities **(1a 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) and (b)		Answers will depend on the case study referenced by the candidate. Award **1 mark** for each relevant description or explanation. Award **a maximum of 5 marks** for description, including **a maximum of 1 mark** for a named example of a strategy. Care should be taken not to credit repeat explanations. **A maximum of 7 marks** should be awarded if the answer does not clearly relate to a specific case study.	**8**	**For rainforest areas:** • agro-forestry — farmers grow trees and crops at the same time **(1a mark)** reducing soil erosion with protection from the rain/sun **(1b mark)** • the crops benefit from the nutrients from the dead organic matter decomposing adding to the fertility of soil **(1b mark)** • selective logging **(1a mark)** allows young trees a guaranteed life span thus protecting the soil from erosion **(1b mark)** • afforestation projects **(1a mark)** reduce wind erosion by lifting the wind higher **(1b mark)** and the tree roots bind the soil and hold it in place **(1b mark)** • forest reserves/National Parks eg Jau National Park **(1 EG mark)** which are protected from exploitation, are purchased by conservation groups or the government, **(1a mark)** allowing indigenous people to practice shifting cultivation which is less destructive of soil **(1b mark)** • monitoring — use of satellite technology and photography **(1a mark)** allows officials to identify and stop illegal logging **(1b mark)** **For a semi-arid area:** • afforestation projects **(1a mark)** such as the Great Green Wall **(1 EG mark)** reduce wind erosion by lifting the wind higher **(1b mark)**, the tree roots bind the soil and hold it in place **(1b mark)** • Fanya Juu terraces create drainage channels **(1a mark)** that increase infiltration **(1b mark)** • Diguettes or 'Magic Stones' to trap rainwater as well as soil on gently sloping land **(1a mark)** which increases infiltration **(1b mark)** and helps retain nutrients in the fertile topsoil **(1b mark)** • agro-forestry — farmers grow trees and crops at the same time **(1a mark)** reducing soil erosion with protection from rain/sun **(1b mark)** • educating farmers on reducing herd sizes **(1a mark)** decreases grazing pressure on the land and reduces soil compaction **(1b mark)** which causes reduces overland flow and promotes infiltration **(1b mark)** • fuel efficient stoves like the Jiko **(1 EG mark)** reduce the demand for fuelwood **(1a mark)**. If these stoves are used, the demand for fuelwood is reduced and trees will be retained for longer **(1b mark)** • Zai pits help retain surface water/nutrients reducing sheetwash **(1b mark)** and adding manure provides the soil with valuable nutrients **(1a mark)** **Or any other valid point.**

Question			General marking instructions for this type of question	Max mark	Specific marking instructions for this question
11.			Award **1 mark** for each relevant point. If candidates discuss more than one area, mark all and award marks to the highest scoring section. Award **a maximum of 1 mark** for specific named examples within the chosen area. **A maximum of 9 marks** should be awarded if the answer does not clearly relate to a specific case study.	**10**	**For the Dorset Coast, points may include:** • traffic congestion on narrow rural roads **(1 mark)** leads to high levels of air and noise pollution **(1 mark)** for example Corfe Castle **(1 EG mark)** • tourists park on grass verges leading to erosion **(1 mark)** eg Damers Road **(1 EG mark)** • tourists wander off footpaths widening them **(1 mark)** and stone walls can be damaged by people climbing over them **(1 mark)** • erosion of sand dunes, eg Studland Sand **(1 EG mark)** and trampling of vegetation **(1 mark)** • increase in litter, could result in animals choking **(1 mark)** • increase in fires, especially on the beaches leaves debris causing visual pollution **(1 mark)** eg Chesil Beach (**1 EG mark)** • noise from military training may distress livestock leading to miscarriages **(1 mark)** • walkers can be denied access to rights of way such as the South West Coast Path **(1 EG mark)** during military training activities **(1 mark)** • swimmers and sunbathers may be disturbed from the noise of motorboats **(1 mark)** • quarrying can produce large quantities of dust **(1 mark)** which can settle on plants stunting their growth **(1 mark)** this can also lead to visual pollution in spectacular landscapes **(1 mark)** • the blasting from quarries ruins the peace and quiet of the area and can ruin the experience for tourists **(1 mark)** • large lorries travelling to and from the quarries can cause structural damage due to vibrations from the heavily loaded vehicles **(1 mark)**. This also causes congestion and increase journey times **(1 mark)** • camp and caravan sites spoil views and are not in keeping with the natural landscape **(1 mark)** **Or any other valid point.**

[END OF MARKING INSTRUCTIONS]