



GCE A LEVEL MARKING SCHEME

SUMMER 2025

**A LEVEL
GEOGRAPHY - UNIT 3
1110U30-1**

About this marking scheme

The purpose of this marking scheme is to provide teachers, learners, and other interested parties, with an understanding of the assessment criteria used to assess this specific assessment.

This marking scheme reflects the criteria by which this assessment was marked in a live series and was finalised following detailed discussion at an examiners' conference. A team of qualified examiners were trained specifically in the application of this marking scheme. The aim of the conference was to ensure that the marking scheme was interpreted and applied in the same way by all examiners. It may not be possible, or appropriate, to capture every variation that a candidate may present in their responses within this marking scheme. However, during the training conference, examiners were guided in using their professional judgement to credit alternative valid responses as instructed by the document, and through reviewing exemplar responses.

Without the benefit of participation in the examiners' conference, teachers, learners and other users, may have different views on certain matters of detail or interpretation. Therefore, it is strongly recommended that this marking scheme is used alongside other guidance, such as published exemplar materials or Guidance for Teaching. This marking scheme is final and will not be changed, unless in the event that a clear error is identified, as it reflects the criteria used to assess candidate responses during the live series.

WJEC GCE A LEVEL GEOGRAPHY
UNIT 3 – GLOBAL SYSTEMS AND GLOBAL GOVERNANCE
SUMMER 2025 MARK SCHEME

Guidance for Examiners

Positive marking

It should be remembered that learners are writing under examination conditions and credit should be given for what the learner writes, as opposed to adopting an approach of penalising him/her for any omissions. It should be possible for a very good response to achieve full marks and a very poor one to achieve zero marks. Marks should not be deducted for a less than perfect answer if it satisfies the criteria of the mark scheme.

The mark scheme for this unit includes both point-based mark schemes and banded mark schemes.

Point-based mark schemes

For questions that are objective or points-based the mark scheme should be applied precisely. Marks should be awarded as indicated and no further subdivision should be made. Each creditworthy response should be ticked in red ink. Do not use crosses to indicate answers that are incorrect. The targeted assessment objective (AO) is also indicated.

Banded mark schemes

For questions with mark bands the mark scheme is in two parts.

The first part is advice on the indicative content that suggests the range of concepts, processes, scales and environments that may be included in the learner's answers. These can be used to assess the quality of the learner's response.

The second part is an assessment grid advising on bands and the associated marks that should be given in responses that demonstrate the qualities needed in the three AOs, AO1, AO2 and AO3, relevant to this unit. The targeted AO(s) are also indicated, for example AO2.1c.

Assessment Objective	Strands	Elements
AO1 Demonstrate knowledge and understanding of places, environments, concepts, processes, interactions and change, at a variety of scales.	N/A	This AO is a single element.
AO2 Apply knowledge and understanding in different contexts to interpret, analyse and evaluate geographical information and issues.	N/A	1a - Apply knowledge and understanding in different contexts to analyse geographical information and issues.
		1b - Apply knowledge and understanding in different contexts to interpret geographical information and issues.
		1c - Apply knowledge and understanding in different contexts to evaluate geographical information and issues
AO3 Use a variety of relevant quantitative, qualitative and fieldwork skills to: - investigate geographical questions and issues - interpret, analyse and evaluate data and evidence - construct arguments and draw conclusions.	1 - investigate geographical questions and issues	N/A
	2 - interpret, analyse and evaluate data and evidence	
	3 - construct arguments and draw conclusions	

Banded mark schemes are divided so that each band has a relevant descriptor. The descriptor for the band provides a description of the performance level for that band. Each band contains marks. Examiners should first read and annotate a learner's answer to pick out the evidence that is being assessed in that question. Once the annotation is complete, the mark scheme can be applied. This is done as a two-stage process.

Banded mark schemes Stage 1 – Deciding on the band

When deciding on a band, the answer should be viewed holistically. Beginning at the lowest band, examiners should look at the learner's answer and check whether it matches the descriptor for that band. Examiners should look at the descriptor for that band and see if it matches the qualities shown in the learner's answer. If the descriptor at the lowest band is satisfied, examiners should move up to the next band and repeat this process for each band until the descriptor matches the answer.

If an answer covers different aspects of different bands within the mark scheme, a 'best fit' approach should be adopted to decide on the band and then the learner's response should be used to decide on the mark within the band. For instance, if a response is mainly in band 2 but with a limited amount of band 3 content, the answer would be placed in band 2, but the mark awarded would be close to the top of band 2 as a result of the band 3 content.

Examiners should not seek to mark candidates down as a result of small omissions in minor areas of an answer.

Banded mark schemes Stage 2 – Deciding on the mark

Once the band has been decided, examiners can then assign a mark. During standardising (marking conference), detailed advice from the Principal Examiner on the qualities of each mark band will be given. Examiners will then receive examples of answers in each mark band that have been awarded a mark by the Principal Examiner. Examiners should mark the examples and compare their marks with those of the Principal Examiner.

When marking, examiners can use these examples to decide whether a learner's response is of a superior, inferior or comparable standard to the example. Examiners are reminded of the need to revisit the answer as they apply the mark scheme in order to confirm that the band and the mark allocated is appropriate to the response provided.

Indicative content is also provided for banded mark schemes. Indicative content is not exhaustive, and any other valid points must be credited. In order to reach the highest bands of the mark scheme a learner need not cover all of the points mentioned in the indicative content but must meet the requirements of the highest mark band. Where a response is not creditworthy, that is contains nothing of any significance to the mark scheme, or where no response has been provided, no marks should be awarded.

The specialised concepts from the specification that apply in the indicative content are underlined.

The mark scheme reflects the layout of the examination paper. Mark questions 1 and 2 and either 3 or 4 in Section A plus questions 5 and 6 and either 7 or 8 in Section B. In Section C, mark either question 9 or 10. If the candidate has responded to all questions in either Section A, B or B, mark all these responses. Award higher marks attained; further possible rubric infringements will be discussed at the marking conference.

Be prepared to reward answers that give **valid and creditworthy** responses, especially if these do not fully reflect the 'indicative content' of the mark scheme.

Section A: Global Systems - Water and Carbon Cycles

1. (a) Identify the characteristics of two different flows within a drainage basin system.	AO1	AO2.1a	AO2.1b	AO2.1c	AO3	Total
	4					4
Indicative content It is anticipated that candidates are familiar with a range of flows within the drainage basin, including: throughfall, stemflow, infiltration, throughflow, percolation and groundwater flow. • overland flow: the flow of water that occurs when excess stormwater, meltwater, or other sources flows over the earth's surface • throughfall: rainwater dripping from leaves and branches towards the ground • stemflow: rainwater that flows into the ground via stems and trunks • infiltration: the movement of water from the ground surface into the soil • throughflow: the sideways movement of water through the soil via pore spaces, fissures and pipes; movement of water above the groundwater table • percolation: the transfer of water from the soil into the underlying bedrock • groundwater flow: vertical and lateral movement of water through a drainage basin's underlying rock as a result of gravity and pressure. Marking guidance Credit other valid points not contained in the indicative content. A relatively unbalanced response can still achieve full marks if one flow is very detailed and the other less so.						

Award the marks as follows:		
Band	Marks	
3	3-4	Demonstrates accurate knowledge and understanding of two flows within the drainage basin system Well annotated sketches / diagrams / maps may also be used and should be credited.
2	2	Demonstrates mostly accurate knowledge and understanding of either one flow in detail or two flows in less detail within the drainage basin system. Generalised sketches / diagrams / maps may also be used and should be credited.
1	1	Demonstrates limited knowledge and understanding of different flows within the drainage basin system. Basic sketches / diagrams / maps may also be used and should be credited.
	0	Response not creditworthy or not attempted.

1. (b) Suggest how the shape of storm hydrographs is influenced by high intensity precipitation.	AO1	AO2.1a	AO2.1b	AO2.1c	AO3	Total
		5				5

Indicative content

Candidates are expected to be familiar with a range of climatic factors that affect the shape of storm hydrographs; these include precipitation intensity, for example:

High-intensity precipitation has a significant impact on the shape of storm hydrographs, typically leading to a more pronounced and steeper curve. Candidates will be familiar with how it influences various components of the hydrograph:

- rising limb: high-intensity rainfall increases the volume of surface runoff, causing the rising limb of the hydrograph to be steep and reach a peak faster; the shorter response time reflects how quickly water is routed to the river or stream.
- peak discharge: the peak of the hydrograph becomes higher due to the rapid accumulation of water in the drainage basin, overwhelming infiltration capacities; high-intensity precipitation is often associated with sharp, narrow peaks in the hydrograph.
- lag time: high-intensity rainfall shortens the lag time between peak rainfall and peak discharge because the water flows quickly over the surface, especially if the ground is already saturated or impermeable, reducing opportunities for infiltration and storage.
- falling limb: the recession or falling limb can be steep if the basin quickly drains the excess water, leading to a rapid return to base flow levels; however, in larger basins or with higher soil infiltration, the falling limb might still take longer.
- base flow: high-intensity rainfall contributes less to base flow than prolonged, moderate precipitation because more water is routed as immediate runoff, leading to less recharge of groundwater.
- seasonal effects of evaporation (determined by temperature); the flashiest hydrographs in the UK are often associated with high intensity winter rainfall falling on already saturated ground at a time of year when evaporation (and indeed transpiration) rates are minimal.

Marking guidance

Credit other valid points not contained in the indicative content.

Award the marks as follows:		
Band	Marks	
3	4-5	Detailed suggestions of how the shape of storm hydrographs is influenced by high intensity precipitation. Well annotated sketches / diagrams / maps may also be used and should be credited.
2	2-3	Partial suggestion of how the shape of storm hydrographs is influenced by high intensity precipitation. Some answers in this band may provide a detailed description of the shape of the hydrograph. Generalised sketches / diagrams / maps may also be used and should be credited.
1	1	Limited suggestion of how the shape of storm hydrographs is influenced by high intensity precipitation. Basic sketches / diagrams / maps may also be used and should be credited.
	0	Response not creditworthy or not attempted.

2. (a) (i) Use Figures 1a and 1b to calculate the difference between below-ground carbon stores.	AO1	AO2.1a	AO2.1b	AO2.1c	AO3	Total
					1	1
Indicative content $226 - 150 = 76$ (1) Marking guidance Award 1 mark for correct answer only. Question does not require that workings are shown or correct unit to be used.						

2. (a) (ii) Use Figures 1a and 1b to calculate the percentage change in above-ground carbon stores. Show your working and give your answer to one decimal place.	AO1	AO2.1a	AO2.1b	AO2.1c	AO3	Total
					2	2
Indicative content $(43 - 180 / 180) \times 100$ (1) $= -76.1\%$ (1) If candidates have written $(180 - 43)/180 \times 100 = 76.1$, award one mark Marking guidance Must clearly show the minus sign or mention decline / negative change to access both marks.						

2. (b) Outline the process of methane feedback in the carbon cycle.	AO1	AO2.1a	AO2.1b	AO2.1c	AO3	Total
	5					5
Indicative content Candidates are expected to be familiar with the concept of feedback in the carbon cycle; feedback occurs when one element of a system changes because of an outside influence. This upsets the dynamic equilibrium, or state of balance, and affects other components in the system. Negative feedback is when a system acts by <i>lessening</i> the effect of the original change and ultimately reversing it. Positive feedback occurs where a change causes a further, or snowball, effect, <i>continuing</i> or even accelerating the original change. Methane feedback: as global mean surface temperature increases, widescale permafrost thawing is occurring at high latitudes in Russia and Canada. Large amounts of methane, which is a powerful greenhouse gas, are stored in frozen soils. As the temperature rises, more methane is released which accelerates anthropogenic warming further. Marking guidance The indicative content is not prescriptive, and candidates are not expected to cover all points for full marks. Credit other valid points not contained in the indicative content including the contribution of livestock and wetlands (particularly tropical wetlands) to methane production, but these must be linked accurately to feedback mechanisms to gain full credit.						

Award the marks as follows:		
Band	Marks	
3	4-5	Demonstrates detailed and accurate knowledge and understanding of the process of methane feedback in the carbon cycle.
2	2-3	Demonstrates partial knowledge and understanding of the process of methane feedback in the carbon cycle.
1	1	Demonstrates limited knowledge and understanding of the process of methane feedback in the carbon cycle.
	0	Response not creditworthy or not attempted.

3. Assess how seasonal changes impact the size of drainage basin stores.	AO1	AO2.1a	AO2.1b	AO2.1c	AO3	Total
	10			8		18

Indicative Content

The indicative content is not prescriptive, and candidates are not expected to cover all points for full marks. Credit other valid points not contained in the indicative content.

AO1

AO1 content encompasses knowledge and understanding of the changes within the drainage basin and how they vary over different timescales (seasons). Development of this may include:

- understanding of the seasonal variations in precipitation directly affect the amount of water entering the drainage basin. Higher rainfall during wet seasons (e.g. monsoon rainfall in India) can lead to increased runoff and higher water levels in rivers and streams, filling up storage areas such as lakes and reservoirs.
- understanding of the seasonal changes affected by snowmelt: in regions with cold winters, snow accumulates during the winter months and melts during the spring and summer, this snowmelt contributes to increased water flow in rivers and streams, replenishing storage areas and affecting the overall water balance in the drainage basin for example in the Alps in spring, the Himalayas in summer.
- understanding of the seasonal changes associated with evapotranspiration: warmer temperatures during summer months lead to increased evaporation rates from surface water bodies and transpiration from vegetation. This reduces the amount of water stored in surface water features like rivers and streams, replenishing storage areas and affecting the overall water balance in the drainage basin.
- understanding of the seasonality of the soil moisture store: during wet seasons, excess precipitation can infiltrate into the soil, replenishing the soil moisture store. Conversely, during dry seasons, reduced precipitation can lead to lower soil moisture levels, impacting the availability of water for agriculture and associated human activities. In places experiencing prolonged dry seasons (drought) such as the Sahel, soils become very dry, and during occasional high intensity rainfall, this can lead to overland flow, thus rapidly increasing channel stores.
- understanding of the seasonality of groundwater recharge: during wet seasons, excess precipitation can infiltrate into the ground, replenishing groundwater stores. Conversely, during dry seasons, reduced precipitation can lead to lower groundwater levels, impacting the availability of water for human consumption and ecosystem health e.g. in grassland ecosystems in Ukraine and Malawi.
- understanding of the seasonal changes on vegetation growth: seasonal changes also influence vegetation growth, which can affect water storage through interception (water held by vegetation on leaf and plant surfaces as well as within the biomass itself), infiltration (water entering the soil) and transpiration (water released by plants). Changes in vegetation cover can impact the overall water balance within the drainage basin.

AO2

Candidates demonstrate application of knowledge and understanding through an examination of the factors which result in the change in size of drainage basin stores over time. Responses may include:

- examination of different seasonal factors which result in the change in size of drainage basin stores (causality, equilibrium and systems)
- examination of the relative importance of the different seasonal factors which result in the change in size of drainage basin stores over time / season (causality, equilibrium, interdependence)
- examination of the changing importance over time / season of the factors which result in the change in size of drainage basin stores (causality, equilibrium, interdependence, system).

Marking guidance

Near the upper end, answers that score highly will show application of knowledge and understanding by **evaluating** complex, interlinked factors, synthesising information, and may come to rational conclusions (dependent on the suggestions that are cited).

Responses in the middle range will show some application of knowledge and understanding to provide some evaluation and synthesis and may draw partially supported conclusions.

Near the lower end, responses provide very limited application of knowledge and understanding of management of deficit within the water cycle to provide limited evaluation.

Credit other valid approaches.

Award the marks as follows:		
Band	AO1 (10 marks)	AO2.1c (8 marks)
	<i>Demonstrates knowledge and understanding of the importance of seasonality in the changing size of drainage basin stores.</i>	<i>Applies knowledge and understanding to examine the importance of seasonality in the changing size of drainage basin stores.</i>
3	7-10 marks Mostly accurate knowledge and understanding of the importance of seasonality in the changing size of drainage basin stores. Developed exemplification. Spelling, punctuation and grammar used with a high degree of accuracy.	6-8 marks Well-developed and structured examination of the importance of seasonality in the changing size of drainage basin stores. Well-developed and structured examination of the relative importance of seasonality in the changing size of drainage basin stores. Well-developed and structured examination of the changing importance of different timescales / seasonality in the changing size of drainage basin stores.
2	4-6 marks Partial knowledge and understanding of the importance of seasonality in the changing size of drainage basin stores. Generalised exemplification. Spelling, punctuation and grammar used with a reasonable degree of accuracy.	4-5 marks Partial or unbalanced examination of the importance of seasonality in the changing size of drainage basin stores. Partial or unbalanced examination of the relative importance of seasonality in the changing size of drainage basin stores. Partial or unbalanced examination of the changing importance of different timescales / seasonality in the changing size of drainage basin stores.
1	1-3 marks Limited knowledge and understanding of the importance of seasonality in the changing size of drainage basin stores. Limited exemplification. Spelling, punctuation and grammar used with limited degree of accuracy.	1-3 marks Limited examination of the of the importance of seasonality in the changing size of drainage basin stores. Limited examination of the relative importance of seasonality in the changing size of drainage basin stores. Limited examination of the changing importance of different timescales / seasonality in the changing size of drainage basin stores.
	0 marks Response not creditworthy or not attempted.	0 marks Response not creditworthy or not attempted.

4. Assess the success of one or more management strategies to restore the carbon store in peatlands.	AO1	AO2.1a	AO2.1b	AO2.1c	AO3	Total
	10			8		18

Indicative Content

The indicative content is not prescriptive, and candidates are not expected to cover all points for full marks. Credit other valid points not contained in the indicative content.

AO1

Specification content encompasses knowledge and understanding of the restoration of the carbon store through management of peatlands. Development of this may include:

- awareness that restoration of peatlands comes about as a result of land use and mismanagement and that only undamaged peatlands continue to function as carbon sinks (this amounts to approx. 20% of peatlands)
- understanding that protecting and restoring peatlands is important for maintaining biodiversity
- recognising that restoration of peatlands could help countries (including the UK) meet reduction targets for long-term greenhouse gas emissions
- awareness that by restoring peatlands, governments may be able to offset greenhouse gas emissions produced by economic activity
- strategies such as 'Moors for the Future' in the Peak District and South Pennines involves the re-establishment of a plant cover dominated by peatland species including sphagnum mosses and the blocking of erosional gullies formed by overland flow
- other strategies by the Welsh National Peatland Action Programme involve the re-wetting of peatlands by raising and stabilising the local water table.

AO2

Candidates demonstrate application of knowledge and understanding through an assessment of the restoration of the carbon store through management of peatlands. Responses may include:

- assessment of the **relative success** of the impacts i.e. scale of the effects of these strategies (adaptation, equilibrium, feedback and resilience)
- assessment of **changing success** over time – e.g. longer-term changes (Welsh National Peatland Action Programme has ambitious targets in its 5-year plan (causality and sustainability)
- assessment of the **relative success** of different elements of the strategy (strategies) selected (resilience, thresholds and sustainability).

Marking guidance

Near the upper end, answers that score highly will show application of knowledge and understanding by **assessing** complex, interlinked factors, synthesising information about the success of management strategies to restore the carbon store in peatlands and may come to rational conclusions.

Responses in the middle range will show some application of knowledge and understanding of the success of management strategies to restore the carbon store in peatlands to provide some evaluation and synthesis and may draw partially supported conclusions.

Near the lower end, responses provide very limited application of knowledge and understanding of the success of management strategies to restore the carbon store in peatlands to provide limited evaluation.

Credit other valid approaches.

Award the marks as follows:		
	AO1 (10 marks)	AO2.1c (8 marks)
Band	<i>Demonstrates knowledge and understanding of the success of one or more management strategies to restore the carbon store in peatlands.</i>	<i>Applies knowledge and understanding to assess the success of one or more management strategies to restore the carbon store in peatlands.</i>
3	7-10 marks Mostly accurate knowledge and understanding of the success of one or more management strategies to restore the carbon store in peatlands. Developed exemplification. Well annotated sketches / diagrams may be used. Spelling, punctuation and grammar used with a high degree of accuracy.	6-8 marks Well-developed and structured assessment of the success of one or more management strategies to restore the carbon store in peatlands. Well-developed and structured assessment of the relative success of management strategies to restore the carbon store in peatlands over time / space. Well-developed and structured assessment of the changing success of management strategies to restore the carbon store in peatlands over time / space.
2	4-6 marks Partial knowledge and understanding of the success of one or more management strategies to restore the carbon store in peatlands. Generalised exemplification. Simple sketches / diagrams may be used. Spelling, punctuation and grammar used with a reasonable degree of accuracy.	4-5 marks Partial or unbalanced assessment of the success of management strategies to restore the carbon store in peatlands. Partial or unbalanced assessment of the relative success of management strategies to restore the carbon store in peatlands over time / space. Partial or unbalanced examination of the changing success of management strategies to restore the carbon store in peatlands over time / space.
1	1-3 marks Limited knowledge and understanding of the success of one or more management strategies to restore the carbon store in peatlands. Limited exemplification. Basic sketches / diagrams may be used. Spelling, punctuation and grammar used with limited degree of accuracy.	1-3 marks Limited assessment of the success of management strategies to restore the carbon store in peatlands. Limited assessment of the relative success of management strategies to restore the carbon store in peatlands over time / space. Limited assessment of the changing success of management strategies to restore the carbon store in peatlands over time / space.
	0 marks Response not creditworthy or not attempted.	0 marks Response not creditworthy or not attempted.

Section B: Global Governance: Change and Challenges

5. (a) Suggest how movements of refugees may have consequences for the lives of people in neighbouring states such as those shown in Figure 2 .	AO1	AO2.1a	AO2.1b	AO2.1c	AO3		Total
			5				5
Indicative content Candidates are expected to be familiar with consequences of these movements on the lives of refugees and their destinations including lives of people in neighbouring states, and actions to tackle refugee crises including the work of UNHCR, national governments and NGOs as well as the powerlessness of some states in conflict or disaster zones in relation to cross-border flows of people (refugees, soldiers, militia groups) and resources and to be able to interpret data and to apply this to their understanding of refugee movements. The data suggests a clear pattern of movement of refugees from conflict zones into adjacent neighbouring safe states. Candidates might suggest that the consequences of refugee movements: • puts pressure on a range of public services including health, education and housing • diverts public funds (taxes) away from the population who have funded them • may result in valuable (agricultural) land being taken up by refugee camps run by NGOs and UNHCR • may lead to conflict between refugee population and local people • may result in cross-border flows of people other than refugees (e.g. soldiers and militia groups). Marking guidance The indicative content is not prescriptive, and candidates are not expected to cover all points for full marks. Credit other valid points not contained in the indicative content.							

Award the marks as follows:		
Band	Marks	
3	4-5	Demonstrates clear applied knowledge and understanding of the consequences of refugee movements on the lives of people in neighbouring states.
2	2-3	Demonstrates partial applied knowledge and understanding of the consequences of refugee movements on the lives of people in neighbouring states.
1	1	Limited grasp of the consequences of refugee movements on the lives of people in neighbouring states.
	0	Response not creditworthy or not attempted.

5. (b) Outline how political strategies lead to the creation of global hubs for investment and migration.	AO1	AO2.1a	AO2.1b	AO2.1c	AO3		Total
	4						4
Indicative content Candidates are expected to know and understand that powerful superpowers exert influence and disproportionately attract international migrants to their own advantage, including political strategies to develop global hubs for investment and migration. For instance: - global hubs like New York and Mumbai have gained in economic strength over time by attracting flows of foreign investment and the international workforce this bring; this is as a result of national immigration policies combined with the pull of the renowned city rather than immigration policies targeted at individual cities - it is widely accepted that without the migrant labour into London following the enlargement of the EU to include states in eastern Europe in 2004 and 2007, the infrastructure for the 2012 Olympics would not have been able to be built - Qatar's government has re-invested its petrodollar wealth in ways which have diversified the national economy and built global influence too: - the city of Doha has become a powerful place where international conferences and sporting events are held, served by Qatar Airways and Doha International airport; important United Nations and World Trade Organization (WTO) meetings have taken place in Doha including the 2022 Football World Cup and the 2023 COP28 - Qatar's Al Jazeera media network rivals the BBC and CNN for influence in some parts of the world and is an important source of soft power. Marking guidance The strongest answers may address investment and migration as separate discussions, but this is not necessary to gain full marks if the examples used link to both. Detailed coverage of one of the two factors can gain marks in lower Band 3. The indicative content is not prescriptive, and candidates are not expected to cover all points for full marks. Credit other valid points not contained in the indicative content.							

Award the marks as follows:		
Band	Marks	
3	3-4	Demonstrates detailed and accurate knowledge of how political strategies lead to the creation of global hubs for investment and migration.
2	2	Demonstrates partial knowledge of how political strategies lead to the creation of global hubs for investment and migration.
1	1	Demonstrates limited knowledge of the how political strategies lead to the creation of global hubs for investment and migration.
	0	Response not creditworthy or not attempted.

6. (a) Use Figure 3 to analyse the significance of the Strait of Malacca as an oil transit chokepoint.	AO1	AO2.1a	AO2.1b	AO2.1c	AO3		Total
Allow 1 mark for any of the following points to a maximum of 3 marks. One mark may be awarded for accurate use of data from the map.					3		3
Indicative content Candidates may identify some of the following points: • The Strait of Malacca is the most significant oil transit chokepoint (1) • The Strait of Malacca is the gateway for oil transit towards Australasia as well as (through the South China Sea) to China and Japan and onwards across the Pacific • There is also a significant oil transit chokepoint at the Strait of Hormuz (1) which acts as a gateway to the Mediterranean • By comparison the Panama Canal is a very small oil transit chokepoint (1). Marking guidance For full marks, candidates should offer exemplification derived from the map, although accurate knowledge of named countries is not expected. Credit other valid approaches.							

6. (b) Outline one international strategy to manage flows of people trafficking.	AO1	AO2.1a	AO2.1b	AO2.1c	AO3		Total
	5						5
Indicative content Candidates are expected to appreciate that alongside legitimate trade and migration flows, illegal trans-oceanic flows of people link societies and places together globally. In managing flows of people trafficking, there are many organisations working in partnership, at a supranational level such as the UN as well as national governments and NGOs. UN: protocol against Smuggling of Migrants with a coordinating role. National Government: UK's Human Trafficking Foundation and the Gangmasters and Labour Abuse Authority (GLAA) interpreting UN recommendations at a national level. NGOs such as Amnesty International and Hope for Justice who are working on the ground to support victims as well as gathering research data to help lobby governments into action. Marking guidance Credit other valid approaches. The strategy does not need to be named if the knowledge and understanding is explicit. Allow national strategy to manage international trafficking.							

Award the marks as follows:		
Band	Marks	
3	4-5	Well-developed recognition of one international strategy to manage flows of people trafficking.
2	2-3	Partial recognition of one international strategy to manage flows of people trafficking.
1	1	Limited recognition of one international strategy to manage flows of people trafficking.
	0	Response not creditworthy or not attempted.

7. Examine the consequences of rural-urban migration in developing countries.	AO1	AO2.1a	AO2.1b	AO2.1c	AO3		Total
	10			8			18

Indicative Content

The indicative content is not prescriptive, and candidates are not expected to cover all points for full marks. Credit other valid points not contained in the indicative content.

AO1

Specification content encompasses knowledge and understanding of the rural-urban migration for rural and urban areas of developing countries, including top-down planning in developing megacities, and bottom-up urban community development. Development of this may include:

- economic consequences on both rural and urban areas e.g. in **rural areas**: economic gain, remittances, land grabs by MNCs; in **urban areas**: plentiful supply of cheap labour for manufacturing and construction; growth of informal economy by unskilled migrants
- social consequence on both rural and urban areas: e.g. in rural areas: an ageing population; villages made up of the women left behind, social tension (possibly linked to remittance receipts); in **urban areas** growth of informal settlements; strain on health and education services; gender imbalance amongst most recent arrivals; excess births following family reunion
- environmental consequences on both rural and urban areas; in **rural areas**: pollution of water courses by agribusiness / polluting extractive industries; abandoned buildings and farmland; in **urban areas**: pollution of water courses by runoff from rubbish dumps; air pollution from manufacturing industry; traffic congestion; sewers unable to cope with volume of waste
- political consequences on both rural and urban areas; in **rural areas**: exploitation of vulnerable communities by unscrupulous local officials and the business community resulting in corruption; in **urban areas**: clashes between established migrants and recent arrivals which local government is unable to resolve; self-serving agendas for improving conditions for some migrants rather than resolving issues across the whole city.

AO2:

Candidates demonstrate application of knowledge and understanding through an assessment of the most/least significant consequences and whether the impact is greater or lesser in rural or urban areas of developing countries. Responses may include:

- examination of the idea that migration can bring benefits as well as challenges to societies within a country (resilience)
- examination of the relative importance of a significance in impacts in rural as opposed to urban areas (adaptation, inequality, scale).
- examination of the effectiveness of the management strategies to overcome the original issues (the push and pull factors) and to address the on- going issues (the consequences) (adaptation, inequality)
- examination of the impact of limiting migration and closing borders through increasing nationalism/ protectionism/populism, and the recent political momentum from far-right groups across Europe/US and Global North (globalisation, inequality, risk, scale)

Marking guidance

Near the upper end, answers that score highly at will show application of knowledge and understanding of the consequences of migration in developing countries by **evaluating** complex, inter-related factors

Responses in the middle range will show some application of knowledge and understanding of the consequences of migration in developing countries to provide some evaluation and synthesis and may draw partially supported conclusions.

Near the lower end, responses provide very limited application of knowledge and understanding of the consequences of migration in developing countries.

Credit other valid approaches.

Award the marks as follows:

	AO1 (10 marks)	AO2.1c (8 marks)
Band	<i>Demonstrates knowledge and understanding of the consequences of rural-urban migration in developing countries.</i>	<i>Applies knowledge and understanding to examine the consequences of rural-urban migration in developing countries.</i>
3	7-10 marks Mostly accurate knowledge and understanding of the consequences of rural-urban migration in developing countries. Developed exemplification. Spelling, punctuation and grammar used with a high degree of accuracy.	6-8 marks Well-developed and structured examination of the consequences of rural-urban migration in developing countries.
2	4-6 marks Partial knowledge and understanding of the consequences of rural-urban migration in developing countries. Generalised exemplification. Spelling, punctuation and grammar used with a reasonable degree of accuracy.	4-5 marks Partial or unbalanced examination of the consequences of rural-urban migration in developing countries.
1	1-3 marks Limited knowledge and understanding of the consequences of rural-urban migration in developing countries. Limited exemplification. Spelling, punctuation and grammar used with limited degree of accuracy.	1-3 marks Limited examination of the consequences of rural-urban migration in developing countries.
	0 marks Response not creditworthy or not attempted.	0 marks Response not creditworthy or not attempted.

8. Examine the consequences of over-exploitation of marine environments.	AO1	AO2.1a	AO2.1b	AO2.1c	AO3		Total
	10			8			18

Indicative Content

The indicative content is not prescriptive, and candidates are not expected to cover all points for full marks. Credit other valid points not contained in the indicative content.

AO1

AO1 content encompasses knowledge and understanding of over-exploitation of marine environments leads to various serious consequences, affecting biodiversity, ecosystem health, and human communities. Main impacts will include:

- loss of biodiversity: overfishing, habitat destruction, and pollution reduce the populations of various marine species; any species become endangered or even extinct (e.g. Chilean seabass and Icelandic haddock), disrupting ecosystems and reducing genetic diversity.
- disruption of marine food webs: over-exploiting top predators like sharks (coastal continental shelves), tuna (Indian Ocean), and cod (Canadian waters) disrupts the balance of marine food webs; this can cause population booms in smaller prey species, which then overconsume their own food sources, further destabilising the ecosystem.
- depletion of fish stocks: high fishing pressures have led to the collapse of fish stocks worldwide; many species cannot reproduce quickly enough to sustain populations, endangering long-term fish availability and affecting food security.
- habitat destruction: activities like trawling and dredging destroy essential habitats, including coral reefs (South China Sea), seagrass beds (Manatee Lagoon, Florida), and mangroves (Bay of Bengal); these habitats provide shelter and breeding grounds for countless marine species, so their destruction further threatens biodiversity.
- increased pollution and waste: industrial fishing practices often lead to pollution through discarded fishing gear, chemical runoffs, and waste by-products. marine pollution harms marine life directly, causes toxic blooms (e.g., red tides on Florida's Gulf Coast), and pollutes coastal areas.
- impact on coastal communities: many coastal communities depend on marine resources for food, income, and cultural practices; depleted fish stocks, habitat loss, and ecosystem degradation reduce local livelihoods and may force people to seek alternative, often less sustainable, sources of income (e.g. Grimsby, UK; Somalia, Gambia).
- climate change exacerbation: marine environments, particularly coral reefs and mangroves, play a critical role in carbon sequestration; over-exploitation reduces these ecosystems' capacity to absorb CO₂, exacerbating climate change (Australia's Great Barrier Reef, The Coral Triangle – South East Asia and Hawaii, USA).
- economic losses: declines in fish populations and ecosystem health impact the fishing and tourism industries, causing significant economic losses; countries that rely heavily on marine resources for export and tourism are particularly vulnerable to these economic shifts (Mozambique, Thailand, Philippines).

AO2

Candidates demonstrate application of knowledge and understanding through an examination of the different consequences of over-exploitation of marine environments. Responses may include:

- examination of which consequence of over-exploitation of marine environments is the most severe (adaptation, sustainability and thresholds)
- examination of the relative importance of the different consequences of over-exploitation of marine environments (adaptation, mitigation, resilience, risk, sustainability and thresholds)
- examination of the relative importance of economic or social or environmental consequences of over-exploitation of marine environments (adaptation, mitigation, resilience, risk, sustainability and thresholds)
- examination of the relative significance of the consequences of over-exploitation of marine environments e.g. some communities are more able to adapt to change than others (HIC vs LIC) (adaptation, mitigation, resilience, risk, sustainability and thresholds)
- examination of strategies to manage the impact of these consequences and their degree of success (adaptation, resilience, sustainability)

Marking guidance

Near the upper end, answers that score highly will show application of knowledge and understanding of the extent to which the consequences of over-exploitation of marine environments impact, for example, people and the environment by evaluating, synthesising information, and may come to rational conclusions.

Responses in the middle range will show some application of knowledge and understanding of the extent to which the consequences of over-exploitation of marine environments impact, for example, people and the environment to provide some discussion and synthesis and may draw partially supported conclusions.

Near the lower end, responses provide very limited application of knowledge and understanding of the extent to which the consequences of over-exploitation of marine environments impact, for example, people and the environment to provide limited evaluation.

Credit other valid approaches.

Award the marks as follows:		
	AO1 (10 marks)	AO2.1c (8 marks)
Band	<i>Demonstrates knowledge and understanding of the consequences of over-exploitation of marine environments.</i>	<i>Applies knowledge and understanding to examine the consequences of over-exploitation of marine environments.</i>
3	7-10 marks Mostly accurate knowledge and understanding of the consequences of over-exploitation of marine environments. Developed exemplification. Spelling, punctuation and grammar used with a high degree of accuracy.	6-8 marks Well-developed and structured examination of the consequences of over-exploitation of marine environments.
2	4-6 marks Partial knowledge and understanding of the consequences of over-exploitation of marine environments. Generalised exemplification. Spelling, punctuation and grammar used with a reasonable degree of accuracy.	4-5 marks Partial or unbalanced examination of the consequences of over-exploitation of marine environments.
1	1-3 marks Limited knowledge and understanding of the consequences of over-exploitation of marine environments. Limited exemplification. Spelling, punctuation and grammar used with limited degree of accuracy.	1-3 marks Limited examination of the consequences of over-exploitation of marine environments.
	0 marks Response not creditworthy or not attempted.	0 marks Response not creditworthy or not attempted.

Section C: 21st Century Challenges

9. To what extent are physical processes responsible for the most significant challenges faced by urban places?	AO1	AO2.1a	AO2.1b	AO2.1c	AO3	Total
	10			10	6	26

Indicative Content

Within the answer to question 9, candidates should use the resources in Figures 4, 5, 6a and 6b, and apply their knowledge and understanding from across the whole specification in order to develop a sustained line of reasoning which is coherent, relevant, substantiated and logically structured. The indicative content is not prescriptive, and candidates are not expected to cover all points for full marks. Credit other valid points not contained in the indicative content.

AO3

This may include:

- analysis of the causes of the challenges faced by people living in earthquake prone areas. (Figure 4)
- analysis of the causes of the challenges faced by people living in polluted areas. (Figure 5)
- analysis of the causes of the challenges faced by people living in urban areas resulting from deindustrialisation. (Figures 6a and 6b)
- synthesis of the figures e.g., identifying that physical processes are responsible for greater risk than human processes. (Figures 4, 5, 6a and 6b).

AO1

Candidates should demonstrate knowledge and understanding of the issues identified in Figures 4-6 and their associated physical processes as well as other issues studied as part of the course. This may include:

- coastal processes that result in challenges for urban communities (causality, mitigation and adaptation, resilience, risk and sustainability)
- glacial processes that result in challenges for urban communities (causality, mitigation and adaptation, resilience, risk and sustainability)
- tectonic processes that result in challenges for urban communities (causality, mitigation and adaptation, resilience, risk and sustainability)
- drainage basin processes that result in drought / floods posing challenges for urban communities (causality, mitigation and adaptation, resilience, risk and sustainability)
- changing places: physical (or human) processes resulting in challenges for urban areas, may require responses by a range of stakeholders
- migration: physical (or human) processes occurring in rural areas might lead to rural urban migration, resulting in increase of people living in informal settlements (inequality, interdependence, resilience, risk and sustainability).

AO2

Candidates should demonstrate application of knowledge and understanding through discussion of the extent of the challenges faced by urban (or rural) areas. This may include:

- assessment of whether it is physical or human processes that create the greatest challenges in urban areas e.g. tectonic hazards v lower development levels, varying quality of governance etc.
- assessment of whether climate change exacerbates some of the physical processes, thereby increasing the extent of the challenges
- assessment of spatial variations in trends (some areas may be able to overcome the challenges via adaptation and mitigation, while other areas may have not).

Marking guidance

The question requires progress beyond explaining the challenges. At the upper end, answers that score highly will show application of knowledge and understanding by assessing the challenges faced by urban (or rural) areas and coming to **rational conclusions** which draw across the Specification.

Responses in the middle range will show some application of knowledge and understanding to provide some assessment and synthesis from across the Specification, prior to drawing **partially supported conclusions**.

Lower end responses provide very limited application of knowledge and understanding of challenges presented by physical processes to provide little assessment.

Credit any other valid approaches.

Award the marks as follows:

	AO1 (10 marks)	AO2.1c (10 marks)	AO3 (6 marks)
Band	<i>Knowledge and understanding of physical processes and the challenges that they pose for urban places.</i>	<i>Apply AO2.1c to assess the extent of the challenges posed by physical processes on places.</i>	<i>Apply AO3 to analyse the physical processes affecting urban places in Figures 4-6.</i>
3	8-10 marks Mostly accurate knowledge and understanding of physical (and human) processes and the challenges that they pose for urban places. Developed exemplification.	8-10 marks Well-developed and structured assessment of the challenges posed by physical (or human) processes on urban places.	5-6 marks Well-developed analysis of the physical (or human) processes affecting urban places in Figures 4-6. Spelling, punctuation and grammar used with a high degree of accuracy.
2	4-7 marks Partial knowledge and understanding of physical (and human) processes and the challenges that they pose for urban places. Generalised knowledge of examples.	4-7 marks Partial or unbalanced assessment of the challenges posed by physical (or human) processes on urban places.	3-4 marks Partial or unbalanced analysis of the physical (or human) processes affecting urban places in Figures 4-6. Spelling, punctuation and grammar used with a reasonable degree of accuracy.
1	1-3 marks Limited knowledge and understanding of physical (and human) processes and the challenges that they pose for urban places. Limited exemplification.	1-3 marks Limited assessment of the challenges posed by physical (or human) processes on urban places.	1-2 marks Limited analysis of the physical (or human) processes affecting urban places in Figures 4-6. Spelling, punctuation and grammar used with limited accuracy.
	0 marks Response not creditworthy or not attempted.	0 marks Response not creditworthy or not attempted.	0 marks Response not creditworthy or not attempted.

10. Discuss the view that physical processes increase inequality in urban places.	AO1	AO2.1a	AO2.1b	AO2.1c	AO3	Total
	10			10	6	26

Indicative Content

Within the answer to question 10, candidates should use the resources in Figures 4, 5, 6a and 6b, and apply their knowledge and understanding from across the whole specification in order to develop a sustained line of reasoning which is coherent, relevant, substantiated and logically structured.

The indicative content is not prescriptive, and candidates are not expected to cover all points for full marks. Credit other valid points not contained in the indicative content.

AO3

This may include:

- analysis of whether the earthquake shown equally affected all groups of people and places in Port au Prince. (Figure 4)
- analysis of whether the human challenges in the settlement shown equally affect all groups of people and places across Mumbai. (Figure 5)
- analysis of whether the legacy of deindustrialisation would affect all groups of people and places equally across Cardiff. (Figures 6a and 6b)
- synthesis of the figures e.g. identifying that physical processes do not affect all urban dwellers and areas equally. (Figures 4, 5, 6a and 6b).

AO1

Candidates should demonstrate knowledge and understanding of the issues identified in Figures 4-6 and their associated physical processes as well as other issues studied as part of the course. This may include:

- coastal processes that result in differential threats to urban communities according to the degree of vulnerability (causality, mitigation and adaptation, resilience, risk and sustainability)
- glacial processes that result in differential threats to urban communities according to the degree of vulnerability (causality, mitigation and adaptation, resilience, risk and sustainability)
- Tectonic processes that result in differential threats to urban communities according to the degree of vulnerability (causality, mitigation and adaptation, resilience, risk and sustainability)
- drainage basin processes that result in drought / floods leading to differential threats to urban communities according to the degree of vulnerability (causality, mitigation and adaptation, resilience, risk and sustainability)
- changing places: there are a range of human factors that lead to exacerbation of inequality in urban areas,
- migration: human or physical processes occurring in rural areas (land grabs, desertification) might lead to rural urban migration, resulting in increase of people living in informal settlements (interdependence, resilience, risk and sustainability).

AO2

Candidates should demonstrate application of knowledge and understanding through discussion of the extent of the challenges faced by urban areas. This may include:

- discussion of whether it is physical or human processes that are responsible for inequality in urban areas.
- discussion of whether mitigation of physical processes might lead to a reduction in inequality in urban areas.
- discussion of whether climate change exacerbates some of the physical processes, thereby increasing the extent of inequality in urban areas.

Assessment of spatial variations in trends (some areas may face worsening inequality whereas areas may not).

Marking guidance

The question requires progress beyond explaining the role of physical processes as a cause of inequality in urban areas. At the upper end, answers that score highly will show application of knowledge and understanding by assessing the extent to which physical processes are a cause of inequality faced by urban areas and coming to **rational conclusions** which draw across the Specification.

Responses in the middle range will show some application of knowledge and understanding to provide some assessment and synthesis from across the Specification, prior to drawing **partially supported conclusions**.

Lower end responses provide very limited application of knowledge and understanding of the causes of inequality to provide little assessment.

Credit any other valid approaches.

Award the marks as follows:			
	AO1 (10 marks)	AO2.1c (10 marks)	AO3 (6 marks)
Band	<i>Knowledge and understanding of how physical (or human) processes might result in inequality in urban areas for both people and places.</i>	<i>Apply AO2.1c to discuss the view that physical processes might lead to increased inequality in urban places.</i>	<i>Apply AO3 to analyse inequality that might result from the physical (or human) processes illustrated by Figures 4-6.</i>
3	8-10 marks Mostly accurate knowledge and understanding of how physical (or human) processes might result in inequality in urban areas for both people and places. Developed exemplification.	8-10 marks Well-developed and structured discussion of the view that physical (or human) processes might lead to increased inequality in urban places.	5-6 marks Well-developed analysis of the inequality that might result from the physical (or human) processes illustrated by Figures 4-6. Spelling, punctuation and grammar used with a high degree of accuracy.
2	4-7 marks Partial knowledge and understanding of how physical (or human) processes might result in inequality in urban areas for both people and places. Generalised knowledge of examples.	4-7 marks Partial or unbalanced discussion of the view that physical (or human) processes might lead to increased inequality in urban places.	3-4 marks Partial or unbalanced analysis of the inequality that might result from the physical (or human) processes illustrated by Figures 4-6. Spelling, punctuation and grammar used with a reasonable degree of accuracy.
1	1-3 marks Limited knowledge and understanding of how physical (or human) processes might result in inequality in urban areas for both people and places. Limited exemplification.	1-3 marks Limited discussion of the view that physical (or human) processes might lead to increased inequality in urban places.	1-2 marks Limited analysis of the inequality that might result from the physical (or human) processes illustrated by Figures 4-6. Spelling, punctuation and grammar used with limited accuracy.
	0 marks Response not creditworthy or not attempted.	0 marks Response not creditworthy or not attempted.	0 marks Response not creditworthy or not attempted.