



**GCE AS  
GEOGRAPHY  
B110QS**

**Summer 2022 examinations**

Component 1	Changing Landscapes	Tuesday, 17 May 2022
Component 2	Changing Places	Friday, 27 May 2022

# **Advance Information**

## **General information for students and teachers**

This advance information provides the focus of the content of the summer 2022 examination papers.

It does not apply to any other examination series.

It is intended to support revision.

It may be used at any time from the date of release.

It must not be taken into the examination.

# Subject information for students and teachers

A guidance document on advance information has been produced by The Joint Council for Qualifications (JCQ) on behalf of all awarding organisations. It can be found [here](#).

The following areas of content are suggested as key areas of focus for revision and final preparation in relation to the Summer 2022 examinations. The aim should still be to cover all specification content in teaching and learning. The information is presented in specification order and not in question order.

Due to the synoptic nature of the assessments, students will be expected to apply their knowledge and understanding to interpret, analyse and evaluate geographical information and issues relating to the content listed within this notification, but may draw upon other areas of specification content where relevant, and credit will be given for this where appropriate. Students and teachers are also reminded that the assessments require students to demonstrate understanding of the specialised concepts.

Suggested key areas of focus for revision and final preparation in relation to Challenges in the 21<sup>st</sup> Century (Component 1 - Section C) and geographical skills (Appendix A of specification) are listed separately within this notification. Component 2 - Section B: Physical and Human Fieldwork Investigation is not covered by this notification.

## **Component 1: Either 1.1: Coastal Landscapes**

<b>Focus</b>	<b>Geographical content</b>
1.1.2 Landforms and landscape systems, their distinctive features and distribution	<ul style="list-style-type: none"><li>• High energy coastal environments and associated erosional landforms and landscape systems including rocky coastlines</li><li>• Low energy coastal environments and associated depositional landforms and landscape systems including sandy coastlines and estuarine coastlines</li></ul>
1.1.3 Factors affecting coastal processes and landforms	<ul style="list-style-type: none"><li>• Diurnal tides, offshore and onshore currents</li><li>• Constructive and destructive wave types and their characteristics and seasonal variations</li><li>• Fetch, wave type, wave orientation, wave refraction and reflection</li><li>• Lithological factors of mineral composition, hardness and solubility of rocks</li><li>• Structural geology including bedding, dip, joints, folding and faulting</li></ul>
1.1.6 Aeolian, fluvial and biotic processes and the characteristics and formation of landforms in coastal landscapes	<ul style="list-style-type: none"><li>• Action of biotic processes and associated development of coral reefs and mangrove coastlines</li></ul>
1.1.9 The impact of human activity on coastal landscape systems	<ul style="list-style-type: none"><li>• Positive impacts of human activity on coastal processes and landforms including management and conservation</li><li>• Negative impacts of human activity on coastal processes and landform including offshore dredging and erosion of sand dunes</li><li>• Case study of one management strategy to manage the impacts of human activity on coastal processes, landforms and landscapes</li></ul>

## Or 1.2: Glaciated Landscapes

<b>Focus</b>	<b>Geographical content</b>
1.2.1 The operation of a glacier as a system	<ul style="list-style-type: none"><li>• The glacial system including inputs, outputs, stores and transfers of energy and materials</li><li>• Change in the inputs to and outputs from a glacier over short- and long-time scales</li><li>• The glacial budget including glacier mass balance and equilibrium</li><li>• Positive and negative feedback in the glacier system</li></ul>
1.2.2 Climate change and the glacier budget over different time scales	<ul style="list-style-type: none"><li>• Causes of climate change through the Quaternary Ice Age including glacials, interglacials and stadial periods and thresholds for change</li><li>• Causes of changes in the glacier budget through historical time including the Little Ice Age</li><li>• Seasonal changes and their impact on the glacier budget</li></ul>
1.2.3 Glacier movement	<ul style="list-style-type: none"><li>• Differences between cold- and warm-based glaciers, their locations and rates of movement</li><li>• Glacier ice movement including internal deformation, basal sliding, sub-glacial bed deformation, surge conditions, compressional / extensional flow</li></ul>
1.2.5 Processes of glacial weathering, erosion and the characteristics and formation of associated landforms and landscapes	<ul style="list-style-type: none"><li>• Freeze-thaw weathering</li><li>• Erosional processes of abrasion, plucking and sub-glacial fluvial erosion</li><li>• Factors affecting glacial erosion including basal thermal regime, ice velocity, ice thickness, bedrock permeability and jointing</li><li>• Characteristics of macro-scale glacial erosional landforms including cirques, pyramidal peaks, arêtes, glacial troughs, ribbon lakes, hanging valleys and truncated spurs; meso-scale glacial landforms including roches moutonnees, crag and tail; micro-scale glacial landforms including striations both for and beyond the UK</li></ul>

## Component 1: Tectonic Hazards

Focus	Geographical content
1.3.1 Tectonic processes	<ul style="list-style-type: none"><li>• Characteristics of the Earth's structure including core, mantle and crust and the boundaries between them</li><li>• Mechanisms of plate movement including internal heating within the Earth, convection currents, ridge push and slab pull</li><li>• Plate distribution and the processes operating at different margins including diverging, converging and conservative margins; and tectonic activity at hot spots</li></ul>
1.3.4 Volcanoes and their impacts	<ul style="list-style-type: none"><li>• Environmental, demographic, economic and social impacts of volcanic hazards on people and the built environment including primary and secondary effects</li><li>• Local scale, regional scale and global scale impacts of volcanic activity</li><li>• Use examples of at least <b>two</b> contrasting contexts to demonstrate the varied degree of risk and impacts of volcanic activity</li></ul>
1.3.7 Human factors affecting risk and vulnerability	<ul style="list-style-type: none"><li>• Economic factors including level of development and level of technology</li><li>• Social factors including the population density, population profile (age, gender) and levels of education</li><li>• Political factors including the quality of governance</li><li>• Geographical factors including rural / urban location, time of day and degree of isolation</li></ul>
1.3.8 Responses to volcanic hazards	<ul style="list-style-type: none"><li>• Monitoring, predicting and warnings of volcanic eruptions</li><li>• Mitigating volcanic hazards and modifying the event, vulnerability, and loss</li><li>• Short-term and long-term responses to the effects of volcanic hazards (the hazard management cycle)</li></ul>
1.3.9 Responses to earthquakes and tsunamis	<ul style="list-style-type: none"><li>• Monitoring, predicting and warnings of earthquakes and tsunami</li><li>• Mitigating earthquake and tsunami hazards and modifying the event, vulnerability, and loss</li><li>• Short-term and long-term responses to the effects of earthquake and tsunami hazards (the hazard management cycle)</li></ul>

## **Component 2: Changing Places**

<b>Focus</b>	<b>Geographical content</b>
2.1.1 Changing place; changing places – relationships and connections	<ul style="list-style-type: none"> <li>• The demographic, socio-economic and cultural characteristics of places as exemplified by the 'home' place (this may be a locality, neighbourhood or a small community) and at least one further contrasting place</li> <li>• Factors (shifting flows of and connections between people, resources, money and investment and ideas) that have shaped and continue to shape the characteristics of place at all scales from local to global, including MNC fast food chains</li> <li>• The way in which continuity and change of these local to global factors affect the learners' own lives and the lives of others</li> </ul>
2.1.3 Changes over time in the economic characteristics of places	<ul style="list-style-type: none"> <li>• Examples of the decline in primary employment in rural areas and in secondary employment in urban places, using the home area where possible and the way in which these changes affect the learners' own lives and the lives of others</li> </ul>
2.1.4 Economic change and social inequalities in deindustrialised urban places	<ul style="list-style-type: none"> <li>• Consequences of the loss of traditional industries in urban areas including the cycle of deprivation, social exclusion, and lower pollution levels</li> <li>• Consequences of loss of secondary industries in urban areas including unemployment</li> <li>• Government policies in deindustrialised places including re-training, economic (local to global), environmental policies and stimulating tertiary growth and investment by foreign MNCs</li> </ul>
2.1.5 The service (tertiary) economy and the 21 <sup>st</sup> Century knowledge economy (quaternary) and its social and economic impacts	<ul style="list-style-type: none"> <li>• The complexity of the changing service economy including the continuing decline for some central urban places, out-of-town retailing and office-parks, internet shopping and central entertainment and the impacts of these changes on learners' own lives and the lives of others</li> </ul>
2.1.7 Rural management and the challenges of continuity and change	<ul style="list-style-type: none"> <li>• On-going challenges in rural places where regeneration / rebranding are absent or have failed or have created conflict</li> </ul>
2.1.9 Urban management and the challenges of continuity and change	<ul style="list-style-type: none"> <li>• On-going challenges in urban places where regeneration / rebranding are absent or have failed or are causing overheating</li> </ul>

## **Component 1: Section C - Challenges in the 21<sup>st</sup> Century**

<b>Topic Area</b>	<b>Specification Reference/Focus</b>
Coastal / Glaciated Landscapes	1.1.8 or 1.2.9
Tectonic Hazards	1.3.8, 1.3.9
Changing Places	2.1.4, 2.1.6, 2.1.8

### **Geographical skills**

<b>Quantitative skills to collect data through numerical measurements</b>	<b>Ref. No.</b>
1. Cartographical information: <ul style="list-style-type: none"><li>• longitude and latitude</li><li>• distance and area</li><li>• direction</li><li>• scale</li></ul>	1.1 1.3 1.4 1.5
2. Number and statistical calculations: <ul style="list-style-type: none"><li>• percentages</li><li>• data sets (small to large) including crowd-sourced and big data (characterised by volume, velocity and variety)</li><li>• measures of central tendency (mean, median, mode)</li><li>• measures of correlation, including a scatter plot, estimated lines of best fit and Spearman Rank</li></ul>	2.3 2.5 2.9 2.11
3. Cartographic and graphical material: <ul style="list-style-type: none"><li>• graphs, including scatter, line, bar, triangular, logarithmic, bipolar</li></ul>	3.6
<b>Qualitative skills to collect data through non-numerical techniques</b>	<b>Ref. No.</b>
8. Textual and visual sources: <ul style="list-style-type: none"><li>• images</li></ul>	8.2

End of advance information