

Summer 2022 Geography GCSE AQA

Paper 1 – Living with the physical environment

Section A			CGP pages:
The challenge of natural hazards	Natural hazards	<ul style="list-style-type: none"> • Definition of a natural hazard. • Types of natural hazard. • Factors affecting hazard risk. 	2-3
	Tectonic hazards	<ul style="list-style-type: none"> • Plate tectonics theory. • Global distribution of earthquakes and volcanic eruptions and their relationship to plate margins. • Physical processes taking place at different types of plate margin (constructive, destructive and conservative) that lead to earthquakes and volcanic activity. • Primary and secondary effects of a tectonic hazard. • Immediate and long-term responses to a tectonic hazard. • Use named examples to show how the effects and responses to a tectonic hazard vary between two areas of contrasting levels of wealth. • Reasons why people continue to live in areas at risk from a tectonic hazard. • How monitoring, prediction, protection and planning can reduce the risks from a tectonic hazard. 	4-8
	Weather hazards	<ul style="list-style-type: none"> • General atmospheric circulation model: pressure belts and surface winds. • Global distribution of tropical storms. • An understanding of the relationship between tropical storms and general atmospheric circulation. • Causes of tropical storms and the sequence of their formation and development. • The structure and features of a tropical storm. • How climate change might affect the distribution, frequency and intensity of tropical storms. • Primary and secondary effects of tropical storms. • Immediate and long-term responses to tropical storms. • Use a named example of a tropical storm to show its effects and responses. • How monitoring, prediction, protection and planning can reduce the effects of tropical storms. • An overview of types of weather hazard experienced in the UK. • An example of a recent extreme weather event in the UK to illustrate- <ul style="list-style-type: none"> - causes - social, economic and environmental impacts - how management strategies can reduce risk. • Evidence that weather is becoming more extreme in the UK. 	9-14
	Climate change	<ul style="list-style-type: none"> • Evidence for climate change from the beginning of the Quaternary period to the present day. • Possible causes of climate change: <ul style="list-style-type: none"> - natural factors – orbital changes, volcanic activity and solar output - human factors – use of fossil fuels, agriculture and deforestation. • Overview of the effects of climate change on people and the environment. • Managing climate change: <ul style="list-style-type: none"> - mitigation – alternative energy production, carbon capture, planting trees, international agreements. 	15-18

		- adaptation – change in agricultural systems, managing water supply, reducing risk from rising sea levels.	
Section B			
The living world	Ecosystems	<ul style="list-style-type: none"> • An example of a small-scale UK ecosystem to illustrate the concept of interrelationships within a natural system, an understanding of producers, consumers, decomposers, food chain, food web and nutrient cycling. • The balance between components. The impact on the ecosystem of changing one component. • An overview of the distribution and characteristics of large scale natural global ecosystems. 	20-22
	Tropical rainforests	<ul style="list-style-type: none"> • The physical characteristics of a tropical rainforest. • The interdependence of climate, water, soils, plants, animals and people. • How plants and animals adapt to the physical conditions. • Issues related to biodiversity. • Changing rates of deforestation. • A case study of a tropical rainforest to illustrate: <ul style="list-style-type: none"> - causes of deforestation – subsistence and commercial farming, logging, road building, mineral extraction, energy development, settlement, population growth. - impacts of deforestation – economic development, soil erosion, contribution to climate change. • Value of tropical rainforests to people and the environment. • Strategies used to manage the rainforest sustainably – selective logging and replanting, conservation and education, ecotourism and international agreements about the use of tropical hardwoods, debt reduction. 	23-29
	Hot deserts	<ul style="list-style-type: none"> • The physical characteristics of a hot desert. • The interdependence of climate, water, soils, plants, animals and people. • How plants and animals adapt to the physical conditions. • Issues related to biodiversity. • A case study of a hot desert to illustrate: <ul style="list-style-type: none"> - development opportunities in hot desert environments: mineral extraction, energy, farming, tourism. - challenges of developing hot desert environments: extreme temperatures, water supply, inaccessibility. • Causes of desertification – climate change, population growth, removal of fuel wood, overgrazing, over-cultivation and soil erosion. • Strategies used to reduce the risk of desertification – water and soil management, tree planting and use of appropriate technology. 	30-33
Section C			
Physical landscapes in the UK	UK physical landscapes	<ul style="list-style-type: none"> • An overview of the location of major upland/lowland areas and river systems. 	39
	Coastal landscapes in the UK	<ul style="list-style-type: none"> • Wave types and characteristics. • Coastal processes: <ul style="list-style-type: none"> - weathering processes – mechanical, chemical - mass movement – sliding, slumping and rock falls - erosion – hydraulic power, abrasion and attrition - transportation – longshore drift - deposition – why sediment is deposited in coastal areas. • How geological structure and rock type influence coastal forms. • Characteristics and formation of landforms resulting from erosion – headlands and bays, cliffs and wave cut platforms, caves, arches and stacks. • Characteristics and formation of landforms resulting from deposition – beaches, sand dunes, spits and bars. 	40-47

		<ul style="list-style-type: none"> • An example of a section of coastline in the UK to identify its major landforms of erosion and deposition. • The costs and benefits of the following management strategies: <ul style="list-style-type: none"> ○ hard engineering – sea walls, rock armour, gabions and groynes ○ soft engineering – beach nourishment and reprofiling, dune regeneration ○ managed retreat – coastal realignment. • An example of a coastal management scheme in the UK to show: <ul style="list-style-type: none"> ○ the reasons for management ○ the management strategy ○ the resulting effects and conflicts. 	
River landscapes in the UK		<ul style="list-style-type: none"> • The long profile and changing cross profile of a river and its valley. • Fluvial processes: <ul style="list-style-type: none"> ○ erosion – hydraulic action, abrasion, attrition, solution, vertical and lateral erosion ○ transportation – traction, saltation, suspension and solution ○ deposition – why rivers deposit sediment. • Characteristics and formation of landforms resulting from erosion – interlocking spurs, waterfalls and gorges. • Characteristics and formation of landforms resulting from erosion and deposition – meanders and ox-bow lakes. • Characteristics and formation of landforms resulting from deposition – levées, flood plains and estuaries. • An example of a river valley in the UK to identify its major landforms of erosion and deposition. • How physical and human factors affect the flood risk – precipitation, geology, relief and land use. • The use of hydrographs to show the relationship between precipitation and discharge. • The costs and benefits of the following management strategies: <ul style="list-style-type: none"> ○ hard engineering – dams and reservoirs, straightening, embankments, flood relief channels ○ soft engineering – flood warnings and preparation, flood plain zoning, planting trees and river restoration. • An example of a flood management scheme in the UK to show: <ul style="list-style-type: none"> ○ why the scheme was required ○ the management strategy ○ the social, economic and environmental issues. 	49-58

Paper 2 – Challenges in the human environment

Section A

Urban issues and challenges	Urbanisation	<ul style="list-style-type: none"> • The global pattern of urban change. • Urban trends in different parts of the world including HICs and LICs. • Factors affecting the rate of urbanisation – migration (push-pull theory), natural increase. • The emergence of megacities. 	69
	Lagos Case Study (NEE)	<ul style="list-style-type: none"> • A case study of a major city in an LIC or NEE to illustrate: <ul style="list-style-type: none"> ○ the location and importance of the city, regionally, nationally and internationally ○ causes of growth: natural increase and migration ○ how urban growth has created opportunities: <ul style="list-style-type: none"> ○ social: access to services – health and education; access to resources – water supply, energy ○ economic: how urban industrial areas can be a stimulus for economic development 	70-72

		<ul style="list-style-type: none"> ○ how urban growth has created challenges: ○ managing urban growth – slums, squatter settlements ○ providing clean water, sanitation systems and energy ○ providing access to services – health and education ○ reducing unemployment and crime ○ managing environmental issues – waste disposal, air and water pollution, traffic congestion. <ul style="list-style-type: none"> ● An example of how urban planning is improving the quality of life for the urban poor. 	
	UK Cities & Liverpool Case study	<ul style="list-style-type: none"> ● Overview of the distribution of population and the major cities in the UK. ● A case study of a major city in the UK to illustrate: <ul style="list-style-type: none"> ○ the location and importance of the city in the UK and the wider world ○ impacts of national and international migration on the growth and character of the city ○ how urban change has created opportunities: <ul style="list-style-type: none"> ○ social and economic: cultural mix, recreation and entertainment, employment, integrated transport systems ○ environmental: urban greening ○ how urban change has created challenges: <ul style="list-style-type: none"> ○ social and economic: urban deprivation, inequalities in housing, education, health and employment ○ environmental: dereliction, building on brownfield and greenfield sites, waste disposal ○ the impact of urban sprawl on the rural–urban fringe, and the growth of commuter settlements. ● An example of an urban regeneration project to show: <ul style="list-style-type: none"> ○ reasons why the area needed regeneration ○ the main features of the project. 	73-76
	Sustainable Urban Living	<ul style="list-style-type: none"> ● Features of sustainable urban living: <ul style="list-style-type: none"> ○ water and energy conservation ○ waste recycling ○ creating green space. ● How urban transport strategies are used to reduce traffic congestion. 	77-79
Section B			
The challenge of resource management	Global distribution of resources	<ul style="list-style-type: none"> ● The significance of food, water and energy to economic and social well-being. ● An overview of global inequalities in the supply and consumption of resources. ● Food: <ul style="list-style-type: none"> ○ the growing demand for high-value food exports from low income countries and all-year demand for seasonal food and organic produce ○ larger carbon footprints due to the increasing number of ‘food miles’ travelled, and moves towards local sourcing of food ○ the trend towards agribusiness. ● Water: <ul style="list-style-type: none"> ○ the changing demand for water ○ water quality and pollution management ○ matching supply and demand – areas of deficit and surplus ○ the need for transfer to maintain supplies. 	96-99

	<ul style="list-style-type: none"> • Energy: <ul style="list-style-type: none"> ○ the changing energy mix – reliance on fossil fuels, growing significance of renewables ○ reduced domestic supplies of coal, gas and oil ○ economic and environmental issues associated with exploitation of energy sources. 	
Water	<ul style="list-style-type: none"> • Areas of surplus (security) and deficit (insecurity): <ul style="list-style-type: none"> ○ global patterns of water surplus and deficit ○ reasons for increasing water consumption: economic development, rising population ○ factors affecting water availability: climate, geology, pollution of supply, over-abstraction, limited infrastructure, poverty. • Impacts of water insecurity – waterborne disease and water pollution, food production, industrial output, potential for conflict where demand exceeds supply. • Overview of strategies to increase water supply: <ul style="list-style-type: none"> ○ diverting supplies and increasing storage, dams and reservoirs, water transfers and desalination ○ an example of a large-scale water transfer scheme to show how its development has both advantages and disadvantages. • Moving towards a sustainable resource future: <ul style="list-style-type: none"> ○ water conservation, groundwater management, recycling, 'grey' water ○ an example of a local scheme in an LIC or NEE to increase sustainable supplies of water. 	107-112

Paper 3 – Geographical applications

Section A – Issue evaluation

- Assessment will consist of a series of questions related to a contemporary geographical issue, leading to a more extended piece of writing which will involve an evaluative judgement.
- Students will apply knowledge and understanding to interpret, analyse and evaluate the information and issue in the pre-release resources booklet and the question paper.
- They will also use geographical skills to set the issue in context and to examine conflicting viewpoints about the issue.

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Section B - Fieldwork

- Students' understanding of the enquiry process will be assessed by questions based on the use of fieldwork materials from an unfamiliar context.
- Students will be expected to:
 - apply knowledge and understanding to interpret, analyse and evaluate information and issues related to geographical enquiry.
 - select, adapt and use a variety of skills and techniques to investigate questions and issues and communicate findings in relation to geographical enquiry.

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