



Geography

EXAM 2023	Year 10	Year 11
Term 1 (21/22)		
Topic and Content	<p>Getting started in IGCSE Geography (0460)</p> <ul style="list-style-type: none"> - Share syllabus with students - brief discussion of the topics that will be taught throughout the course and how the IGCSE will be assessed. <p>1.1 Population Dynamics</p> <ul style="list-style-type: none"> • The rapid increase in the world’s population • The causes of changes in population size • The demographic transition model (DTM) • Reasons for contrasting rates of population growth • Over and under-population • The effectiveness of population policies <p>Case Studies required for 1.1</p> <ul style="list-style-type: none"> • A country which is overpopulated • A country which is under-populated • A country with a high rate of natural population growth • A country with a low rate of population growth (or population decline). <p>1.3 Population Structure</p> <ul style="list-style-type: none"> • Variations in population structure • Population pyramids • Demographic transition and hanging population 	<p>2.2 Rivers</p> <ul style="list-style-type: none"> • Changing channel characteristics • Drainage basins • River processes • Landforms of erosion • Landforms of deposition • River hazards and opportuntties • Managing the impacts of floods <p>Case Study required for 2.2</p> <ul style="list-style-type: none"> • The opportunities presented by a river or rivers, the associated hazards and their management <p>3.4 Tourism</p> <ul style="list-style-type: none"> • The growth of tourism • The benefits and disadvantages of tourism to receiving areas • The management and sustainability of tourism <p>Case Study required for 3.4</p> <ul style="list-style-type: none"> • An area where tourism is important

	<p>structure</p> <ul style="list-style-type: none"> • The impacts of differing population structures • The dependency ratio <p>Case Study required for 1.3</p> <ul style="list-style-type: none"> • A country with a high dependent population <p>1.4 Population density and distribution</p> <ul style="list-style-type: none"> • Population density - how it is measured • How people are spread around the world <p>Case Studies required for 1.4</p> <ul style="list-style-type: none"> • A densely populated country or area (at any scale from local to regional) • A sparsely populated country or area (at any scale from local to regional) 	
Skills	<p>1.1 Population Dynamics Candidates should be able to:</p> <ul style="list-style-type: none"> • Describe and give reasons for the rapid increase in the world's population • Show an understanding of over-population and under-population • Understand the main causes of a change in population size • Give reasons for contrasting rates of natural population change Describe and evaluate population policies <p>Further guidance:</p> <ul style="list-style-type: none"> • Causes and consequences of over-population and under-population • How birth rate, death rate and migration contribute to the population of a country increasing or declining • Impacts of social, economic and other factors (including government policies, HIV/AIDS) on birth and death rates. <p>1.3 Population Structure Candidates should be able to:</p>	<p>2.2 Rivers Candidates should be able to:</p> <ul style="list-style-type: none"> • Explain the main hydrological characteristics and processes which operate in rivers and drainage basins Demonstrate an understanding of the work of a river in eroding, transporting and depositing • Describe and explain the formation of the landforms associated with these processes • Demonstrate an understanding that rivers present hazards and offer opportunities for people • Explain what can be done to manage the impacts of river flooding <p>Further guidance:</p> <ul style="list-style-type: none"> • Characteristics of rivers (including width, depth, speed of flow, discharge) and drainage basins (including watershed, tributary, confluence) • Processes which operate in a drainage basin (including interception, infiltration, throughflow, groundwater flow, evaporation, overland flow) • Forms of river valleys – long profile and shape in cross-section, waterfalls, potholes, meanders, oxbow

	<ul style="list-style-type: none"> Identify and give reasons for and implications of different types of population structure <p>Further guidance:</p> <ul style="list-style-type: none"> Age/sex pyramids of countries at different levels of economic development <p>1.4 Population Distribution and Density Candidates should be able to: Describe the factors influencing the density and distribution of population</p> <p>Further guidance:</p> <ul style="list-style-type: none"> Physical, economic, social and political factors 	<ul style="list-style-type: none"> lakes, deltas, levées and flood plains Causes of hazards (including flooding and river erosion) Opportunities of living on a flood plain or a delta or near a river Drawing and explaining geographical processes Fieldwork skills for Paper 4 <p>3.4 Tourism Candidates should be able to:</p> <ul style="list-style-type: none"> Describe and explain the growth of tourism in relation to the main attractions of the physical and human landscape Evaluate the benefits and disadvantages of tourism to receiving areas Demonstrate an understanding that careful management of tourism is required in order for it to be sustainable
Methods of Assessment	<ul style="list-style-type: none"> Description and analysis of graphs and data Drawing and analysing population pyramids Linking population structure to development Case studies Past paper questions 	<ul style="list-style-type: none"> Annotation of diagrams and maps Drawing diagrams of processes Learning key term definitions Writing case studies - framework Description and analysis of graphs and data Past paper questions Case study assessment
Term 2		
Topic and Content	<p>1.2 Migration</p> <ul style="list-style-type: none"> The nature and reasons for population migration The impacts of migrations <p>Case Study required for 1.2</p> <ul style="list-style-type: none"> An international migration <p>2.1 Earthquakes and Volcanoes</p> <ul style="list-style-type: none"> Types and features of volcanoes and earthquakes Distribution of earthquakes and volcanoes Plate tectonics 	<p>1.5 Settlements and Service Provision</p> <ul style="list-style-type: none"> Rural Settlement Pattern Village form Site and situation Settlement Hierarchy Factors affecting the size, growth and function of settlements <p>Case Study required for 1.5</p> <ul style="list-style-type: none"> Settlement and service provision in an area

	<ul style="list-style-type: none"> • Plate boundaries • Causes of earthquakes and volcanoes • Natural hazards • Managing natural hazards <p>Case Studies required for 2.1</p> <ul style="list-style-type: none"> • An earthquake • A volcano 	<p>1.6 Urban Settlements</p> <ul style="list-style-type: none"> • Urban land use • Landuse models (Burgess adn Hoyt) • Internal structure of towns and cities • Problems associated with urban growth <p>Case Study required for 1.6</p> <ul style="list-style-type: none"> • An urban area or urban areas <p>1.7 Urbanisation</p> <ul style="list-style-type: none"> • Urbanisation • Urban problems in developing countries • Solutions to urban problems • New cities • Managing urban problems • Urbanisation and the environment <p>Case Study required for 1.7</p> <ul style="list-style-type: none"> • A rapidly growing urban area in a developing country and migration to it
Skills	<p>1.2 Migration</p> <p>Candidates should be able to:</p> <ul style="list-style-type: none"> • Explain and give reasons for population migration • Demonstrate an understanding of the impacts of migration <p>Further guidance:</p> <ul style="list-style-type: none"> • Internal movements such as rural-urban migration, as well as international migrations, both voluntary and involuntary • Positive and negative impacts on the destination and origin of the migrants, and on the migrants themselves. <p>2.1 Earthquakes and Volcanoes</p> <p>Candidates should be able to:</p> <ul style="list-style-type: none"> • Describe the main types and features of volcanoes and 	<p>1.5 Settlement</p> <p>Candidates should be able to:</p> <ul style="list-style-type: none"> • Explain the patterns of settlement • Describe and explain the factors which may influence the sites, growth and functions of settlements • Give reasons for the hierarchy of settlements and services <p>Further guidance</p> <ul style="list-style-type: none"> • Dispersed, linear, and nucleated settlement patterns • Influence of physical factors (including relief, soil, water supply) and other factors (including accessibility, resources) • High-, middle- and low-order settlements and services.

- earthquakes
- Describe and explain the distribution of earthquakes and volcanoes
- Describe the causes of earthquakes and volcanic eruptions and their effects on people and the environment Demonstrate an understanding that volcanoes present hazards and offer opportunities for people
- Explain what can be done to reduce the impacts of earthquakes and volcanoes

Further guidance

- Types of volcanoes (including strato-volcanoes [composite cone] and shield volcano)
- Features of volcanoes (including crater, vent, magma chamber)
- Features of earthquakes (including epicentre, focus, magnitude)
- The global pattern of plates and their structure; an awareness of plate movements, subduction zones and their effects – constructive/divergent, destructive/convergent and conservative plate boundaries

- Sphere of influence and threshold population

1.6 Urban Settlements

Candidates should be able to:

- Describe and give reasons for the characteristics of, and changes in, land use in urban areas
- Explain the problems of urban areas, their causes and possible solutions

Further guidance

- Land use zones including the Central Business District (CBD), residential areas, industrial areas and the rural-urban fringe of urban areas in countries at different levels of economic development
- The effect of change in land use and rapid urban growth in an urban area including the effects of urban sprawl
- Different types of pollution (air, noise, water, visual), inequality, housing issues, traffic congestion and conflicts over land use change

1.7 Urbanisation

Candidates should be able to:

- Identify and suggest reasons for rapid urban growth
- Describe the impacts of urban growth on both rural and urban areas, along with possible solutions to reduce the negative impacts

Further guidance

- Reference should be made to physical, economic and social factors which result in rural depopulation and the movement of people to major cities
- The effects of urbanisation on the people and the natural environment
- The characteristics of squatter settlements
- Strategies to reduce the negative impacts of urbanisation

Methods of Assessment	<ul style="list-style-type: none"> • Annotation of diagrams and maps • Drawing diagrams of processes • Learning key term definitions • Writing case studies - framework • Description and analysis of graphs and data • Case studies • Past paper questions 	<ul style="list-style-type: none"> • Writing case studies - framework • Description and analysis of graphs and data • Case studies • Past paper questions
Term 3		
Topic and Content	<p>3.1 Development</p> <ul style="list-style-type: none"> • Indicators of development • Explaining inequalities between countries • Explaining inequalities within countries • Classifying production into different economic sectors • How employment structure varies • The process of globalisation • The impacts of globalisation: the global scale • The impacts of globalisation: the national scale • The impacts of globalisation: the local scale <p>Case Study required for 3.1</p> <ul style="list-style-type: none"> • A transnational corporation and its global links <p>3.7 Environmental risks of economic development</p> <ul style="list-style-type: none"> • The threat of economic activities to the natural environment • Enhanced global warming • Soil erosion and desertification • Examples of environments under threat • The importance of resource conservation • China's Pearl River Delta <p>Case Study required for 3.7</p> <ul style="list-style-type: none"> • An area where economic development is taking place and causing the environment to be at risk 	<p>2.4 Weather</p> <ul style="list-style-type: none"> • Measuring the weather • Recording the weather <p>2.5 Climate and natural vegetation</p> <ul style="list-style-type: none"> • Equatorial and hot desert climates • Factors affecting climate • Tropical rainforests • Hot deserts • Impacts of deforestation of the tropical rainforest • Vegetation distribution in arid areas (eg Death Valley) <p>Case Study required for 2.5</p> <ul style="list-style-type: none"> • An area of tropical rainforest • An area of hot desert <p>3.2 Food Production</p> <ul style="list-style-type: none"> • Agricultural systems • The influence of natural and human inputs on agricultural land use. <p>Case Studies required for 3.2</p> <ul style="list-style-type: none"> • A farm or agricultural system • A country or region suffering from food shortages <p>3.6 Water</p> <ul style="list-style-type: none"> • The global water crisis

	<p>Paper 2: Map skills.</p> <ul style="list-style-type: none"> • Latitude and longitude • Grid references • Scale • Use of key • Height on maps/ contours/relief • Drainage patterns and density • Cross sections 	<ul style="list-style-type: none"> • Methods of water supply • How water uses varies • Water shortages • Water management <p>Case Study required for 3.6</p> <ul style="list-style-type: none"> • Water supply in a country or area
Skills	<p>3.1 Development Candidates should be able to:</p> <ul style="list-style-type: none"> • Use a variety of indicators to assess the level of development of a country • Identify and explain inequalities between and within countries • Classify production into different sectors and give illustrations of each • Describe and explain how the proportions employed in each sector vary according to the level of development <p>Describe and explain the process of globalisation, and consider its impacts</p> <p>Further guidance</p> <ul style="list-style-type: none"> • Indicators of development (including GNP per capita, literacy, life expectancy and composite indices, e.g. Human Development Index (HDI)) • Primary, secondary, tertiary and quaternary sectors • Use of indicators of development and employment structure to compare countries at different levels of economic development and over time • The role of technology and transnational corporations in globalisation along with economic factors which give rise to globalisation Impacts at a local, national and global scale <p>3.7 Environmental risks of economic development Candidates should be able to:</p> <ul style="list-style-type: none"> • Describe how economic activities may pose threats to the natural environment and people, locally and 	<p>2.4 Weather Candidates should be able to: Describe how weather data are collected</p> <ul style="list-style-type: none"> • Make calculations using information from weather instruments Use and interpret graphs and other diagrams showing weather and climate data <p>Further guidance</p> <ul style="list-style-type: none"> • Describe and explain the characteristics, siting and use made of a Stevenson Screen Rain gauge, maximum-minimum thermometer, wet-and-dry bulb thermometer (hygrometer), sunshine recorder, barometer, anemometer and wind vane, along with simple digital instruments which can be used for weather observations; • observations of types and amounts of cloud <p>2.5 Climate and Natural vegetation Candidates should be able to:</p> <ul style="list-style-type: none"> • Describe and explain the characteristics of two climates: • • equatorial • hot desert • Describe and explain the characteristics of tropical rainforest and hot desert ecosystems • Describe the causes and effects of deforestation of tropical rainforest <p>Further guidance</p> <ul style="list-style-type: none"> • Climate characteristics (including temperature [mean temperature of the hottest month, mean temperature of the coolest month, annual range]; and precipitation

globally Demonstrate the need for sustainable development and management

- Understand the importance of resource conservation

Further guidance

- Threats to the natural environment (including soil erosion, desertification, enhanced global
- Linking human actions to the environment

Paper 2 Mapskills

- Locating places on maps
- Use of atlases
- Coordinates - 6 figure grid references
- Measuring distances
- Interpreting contour patterns
- Drawing cross-sections

including convection and relief rainfall [the amount and seasonal distribution])

- Factors influencing the characteristics of these climates (including latitude, pressure systems, winds, distance from the sea, altitude and ocean currents)
- Climatic graphs showing the main characteristics of temperature and rainfall of the two climates
- The relationship in each ecosystem of natural vegetation, soil, wildlife and climate
- Effects on the natural environment (both locally and globally) and effects on people

3.2 Food Production

Candidates should be able to:

- Describe and explain the main features of an agricultural system: inputs, processes and outputs
- Recognise the causes and effects of food shortages and describe possible solutions to this problem

Further guidance

- Farming types: commercial and subsistence; arable, pastoral and mixed; intensive and extensive
- The influence of natural and human inputs on agricultural land use (including natural inputs [relief, climate and soil] and human inputs [economic and social]).
- Their combined influences on the scale of production, methods of organisation and the products of agricultural systems
- Natural problems which cause food shortages (including drought, floods, tropical storms, pests) and economic and political factors (including low capital investment, poor distribution/transport difficulties, wars)
- The negative effects of food shortages; the effects of food shortages in encouraging food aid and measures to increase output

3.6 Water

		<p>Candidates should be able to:</p> <ul style="list-style-type: none"> • Describe methods of water supply and the proportions of water used for agriculture, domestic and industrial purposes in countries at different levels of economic development • Explain why there are water shortages in some areas and demonstrate that careful management is required to ensure future supplies <p>Further guidance</p> <ul style="list-style-type: none"> • Methods of water supply (including reservoirs/dams, wells and boreholes, desalination) • The impact of lack of access to clean water on local people and the potential for economic development
Methods of Assessment	<ul style="list-style-type: none"> • Description and analysis of graphs and data • Linking population structure to development • Case studies • Map skills assessments • Past paper questions 	<ul style="list-style-type: none"> • Description and analysis of graphs and data • Writing case studies - framework • Description and analysis of graphs and data • Case studies • Past paper questions
Term 4		
Topic and Content	<p>2.3 Coasts</p> <ul style="list-style-type: none"> • Marine processes • Landscapes of erosion • Deposition • Sand dunes • Coral reefs • Coastal hazards and opportunities • Tropical storms • Impacts of hurricanes <p>Case Study required for 2.3</p> <ul style="list-style-type: none"> • The opportunities presented by an area or areas of coastline, the associated hazards and their management <p>3.3 Industry</p>	<p>Revision</p> <p>Practise past papers</p> <p>Preparation for external examination (usually early may)</p>

	<ul style="list-style-type: none"> • Industrial systems and types • Factors affecting the location of industry • Industrial agglomeration <p>Case Study required for 3.3</p> <ul style="list-style-type: none"> • An industrial zone or factory <p>3.5 Energy</p> <ul style="list-style-type: none"> • Non-renewable and renewable energy supplies • The benefits and disadvantages of nuclear power and renewable energy <p>Case Study required for 3.5</p> <ul style="list-style-type: none"> • Energy supply in a country or area 	
Skills	<p>2.3 Coasts</p> <p>Candidates should be able to:</p> <ul style="list-style-type: none"> • Demonstrate an understanding of the work of the sea and wind in eroding, transporting and depositing • Describe and explain the formation of the landforms associated with these processes • Describe coral reefs and mangrove swamps and the conditions required for their development • Demonstrate an understanding that coasts present hazards and offer opportunities for people • Explain what can be done to manage the impacts of coastal erosion <p>Further guidance</p> <ul style="list-style-type: none"> • Cliffs, wave-cut platforms, caves, arches, stacks, stumps, bay and headland coastlines, beaches, spits, and coastal sand dunes • Hazards (including coastal erosion and tropical storms) <p>3.3 Industry</p> <p>Candidates should be able to:</p> <ul style="list-style-type: none"> • Demonstrate an understanding of an industrial system: inputs, processes and outputs (products and waste) • Describe and explain the factors influencing the distribution and location of factories and industrial 	

	<p>zones</p> <p>Further guidance</p> <ul style="list-style-type: none"> • Industry types: manufacturing, processing, assembly and high technology industry • The influence of factors including land, labour, raw materials and fuel and power, transport, markets and political factors • Their combined influences on the location, scale of production, methods of organisation and the products of the system Industrial zones and/or factories with respect to locational and siting factors <p>3.5 Energy</p> <p>Candidates should be able to:</p> <ul style="list-style-type: none"> • Describe the importance of non-renewable fossil fuels, renewable energy supplies, nuclear power and fuelwood; globally and in different countries at different levels of development • Evaluate the benefits and disadvantages of nuclear power and renewable energy sources <p>Further guidance</p> <ul style="list-style-type: none"> • Non-renewable fossil fuels including coal, oil and natural gas. • Renewable energy supplies including geothermal, wind, HEP, wave and tidal power, solar power and biofuels 	
Methods of Assessment	<ul style="list-style-type: none"> • Description and analysis of graphs and data • Case studies • Past paper questions • End of year assessment 	

In addition to the above skills, candidates should be able to:

- add, subtract, multiply and divide

- understand map scale and the use of the scale line and representative fractions
- understand the terms mean and range
- use averages, decimals, fractions, percentages and ratios
- use standard notation, including both positive and negative indices
- understand significant figures and use them appropriately
- recognise positive and negative relationships shown by scatter graphs
- draw and interpret graphs from given data for the types of graph listed in the syllabus
- select suitable scales and axes for graphs
- use a ruler and protractor.

Calculators may be used in all examinations.