DULWICH COLLEGE | SINGAPORE |

Year 10 Geography Examination Guidance

Curriculum Overview for *(I)GCSE Geography/Cambridge/0460*

Year	Michaelmas term	Lent term	
9	1. Population Dynamics 2. Migration 3. Population structure	4. Population density and distribution 5. Settlements and service provision	6. Urban 7. Urbani 7a. SK
10	8. Earthquakes and Volcanoes 9. Rivers 10. Coasts	11. Weather 12. Climate and natural vegetation	13. Develo 14. Food p 14a. S
11	15. Industry 16. Tourism 17. Energy	18. Water 19. Environmental risks of economic development 19a. Skills	20. Revisio Pubic Examin

Assessment:
3 exams: Paper 1: Geographical Themes 45%
Paper 2: Geographical Skills 27.5%
Paper 3: Alternative to coursework 27.5%

The Examination will have **THREE** papers.

Paper 1 "Geographical Themes" is worth 45% of your overall mark, lasts for 1 hour. This is assessing all the work done in class and at home on the topics covered since the start of year 9 (**see list of topics covered below**).

Paper 2 "Geographical Skills" is worth 27.5% of your overall mark. This examination will last for two hours. This paper is based on testing skills of application, interpretation and analysis of geographical information, e.g. topographical maps, other maps, diagrams, graphs, tables of data, written material, photographs and pictorial material, and on the application of graphical and other techniques as appropriate.

Candidates should have the following in the examination room:

- **a pencil, rubber, ruler, a protractor and a calculator**
- **access to a sheet of plain paper for measuring distance or for assisting with cross-sections on the large- scale map.**

Paper 4 "Alternative to coursework" is worth 27.5% of your overall mark. As an alternative to coursework, candidates will be set a series of tasks on this paper on issues relating to one or more of the syllabus themes (syllabus content). Questions test the methodology of questionnaires, observation, counts, measurement techniques, and will involve hypothesis testing appropriate to specific topics. The processing, presentation and analysis of data will be tested. Candidates must answer all the questions on the paper.

All answers are to be written on the exam paper.

The topics we have covered are:

Theme 1: Population and settlement

Please read section 5.3, 'Case studies' to understand the options when planning case studies. Please also read section 5.4, 'Syllabus content', and note whether the word 'including' is used.

1.1 Population dynamics	• Describe and give reasons for the rapid increase in the world's population	
	• Show an understanding of over-population and under- population	Causes and consequences of over-population and under-population
	• Understand the main causes of a change in population size	How birth rate, death rate and migration contribute to the population of a country increasing or declining
	• Give reasons for contrasting rates of natural population change	Impacts of social, economic and other factors (including government policies, HIV/AIDS) on birth and death rates
	• Describe and evaluate population policies	
Case studies required in 1.1	• A country which is over-populated • 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)	
1.2 Migration	• Explain and give reasons for population migration	Internal movements such as rural-urban migration, as well as international migrations, both voluntary and involuntary
	• Demonstrate an understanding of the impacts of migration	Positive and negative impacts should be considered, on the destination and origin of the migrants, and the migrants themselves
Case study required in 1.2	• An international migration	
1.3 Population structure	• Identify and give reasons for and implications of different types of population structure	Age/sex pyramids of countries at different levels of economic development
Case study required in 1.3	• A country with a high dependent population	

1.4 Population density and distribution	• Describe the factors influencing the density and distribution of population	Physical, economic, social and political factors
Case studies required in 1.4	• 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)	
1.5 Settlements and service provision	• Explain the patterns of settlement	Dispersed, linear, and nucleated settlement patterns
	• Describe and explain the factors which may influence the sites, growth and functions of settlements	Influence of physical factors (including relief, soil, water supply) and other factors (including accessibility, resources)
	• Give reasons for the hierarchy of settlements and services	High-, middle- and low-order settlements and services. Sphere of influence and threshold population
Case study required in 1.5	• Settlement and service provision in an area	
1.6 Urban settlements	• Describe and give reasons for the characteristics of, and changes in, land use in urban areas	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
	• Explain the problems of urban areas, their causes and possible solutions	Different types of pollution (air, noise, water, visual), inequality, housing issues, traffic congestion and conflicts over land use change
Case study required in 1.6	• An urban area or areas	

1.7 Urbanisation	• 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	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 natural environment. The characteristics of squatter settlements Strategies to reduce the negative impacts of urbanisation
Case study required in 1.7	• A rapidly growing urban area in a developing country and migration to it	

Theme 2: The natural environment

2.1 Earthquakes and volcanoes	• Describe the main types and features of volcanoes and earthquakes	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, intensity)
	• Describe and explain the distribution of earthquakes and volcanoes	The global pattern of plates, their structure, and an awareness of plate movements and their effects – constructive/divergent, destructive/convergent and conservative plate boundaries
	• 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	
Case studies required in 2.1	• An earthquake • A volcano	

2.2 Rivers	• Explain the main hydrological characteristics and processes which operate within rivers and drainage basins	Characteristics of rivers (including width, depth, speed of ow) and drainage basins (including watershed, tributary, confluence) Processes which operate in a drainage basin (including interception, infiltration, through ow, groundwater ow, evaporation, overland ow)
	• 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	Forms of river valleys – long pro le and shape in cross section, waterfalls, potholes, meanders, oxbow lakes, deltas, levées and flood plains
	• Demonstrate an understanding that rivers present hazards and offer opportunities for people	Causes of hazards including flooding and river erosion Opportunities of living on a flood plain, a delta or near a river
	• Explain what can be done to manage the impacts of river flooding	
Case study required in 2.2	• The opportunities presented by a river or rivers, the associated hazards and their management	

2.3 Coasts	• 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	Cliffs, wave-cut platforms, caves, arches, stacks, bay and headland coastlines, beaches, spits, and coastal sand dunes
	• 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	Hazards including coastal erosion and tropical storms
	• Explain what can be done to manage the impacts of coastal erosion	
Case study required in 2.3	• The opportunities presented by an area or areas of coastline, the associated hazards and their management	
2.4 Weather	• Describe how weather data is collected	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
	• Make calculations using information from weather instruments	
	• Use and interpret graphs and other diagrams showing weather and climate data	

2.5 Climate and natural vegetation	• Describe and explain the characteristics of two climates: ○ equatorial ○ hot desert	Climate characteristics (including temperature [mean temperature of the hottest month, mean temperature of the coolest month, annual range]; and precipitation [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
	• Describe and explain the characteristics of tropical rainforest and hot desert ecosystems	The relationship in each ecosystem of natural vegetation, soil, wildlife and climate
	• Describe the causes and effects of deforestation of tropical rainforest	Effects on the natural environment (both locally and globally) along with effects on people
Case studies required in 2.5	• An area of tropical rainforest • An area of hot desert	

Revision Resources

- Your file
- Firefly Pages
- Your textbook
- BBC bitesize website:
- http://www.bbc.co.uk/education/subjects/z34k7ty