




## Paper 1: Physical Geography

### Exam section: Living World – Ecosystems, Rainforests and Hot Deserts

Broad section	Specific content			
Ecosystems exist at a range of scales and involve the interaction between biotic and abiotic components.	Know what the following are in a food chain/food web: producers, consumers, decomposers, biotic and abiotic factors			
	Know what nutrient cycling is			
	For a small scale UK ecosystem ( pond) know a food web and some components – west park pond			
	For a small scale UK ecosystem (pond) know how humans can impact it – west park pond			
	Can work out/explain how changing one impact on the ecosystem (e.g. decreasing the amount of nutrients in the soil) changings other components (e.g. knock on effects in the food chain).			
	Know what a biome is and how many there are			
	Can describe the likely characteristics of a biome based on where it is located.			
Tropical rainforest ecosystems have a range of distinctive characteristics.	Know the climate of a tropical rainforest.			
	Know the broad locations of the tropical rainforests			
	Know the layers of a tropical rainforest.			
	Know what the soils of the rainforest are like and why			
	Can describe relationships between climate, water, soils, plants, animals and people in the rainforest.			
	Explain how specific plants have adapted to the physical conditions.			
	Explain how specific animals adapted to the physical conditions.			
	Know what biodiversity is and why it is important in the rainforest.			
Deforestation has economic and environmental impacts.	Can describe from a graph how deforestation rates have increased and decreased			
	For the Amazon rainforest know the following:			
	•• causes of deforestation <b>with examples</b> – subsistence and commercial farming, logging, road building, mineral extraction, energy development, settlement, population growth. <b>BELO MONTE DAM and how this reduces the development gap</b>			
	•• impacts of deforestation <b>with examples</b> – economic development, soil erosion, contribution to climate change. <b>BELO MONTE DAM – and how this reduces the development gap</b>			
Tropical rainforests need to be managed to be sustainable.	Can explain why tropical rainforests are important to protect for people			
	Can explain why tropical rainforests are important to protect for the environment.			
	Can describe and assess the sustainability and effectiveness of the rainforest management strategies of: selective logging and replanting.			

	Can describe and assess the sustainability and effectiveness of the rainforest management strategies of: conservation and education.			
	Can describe and assess the sustainability and effectiveness of the rainforest management strategies of: ecotourism.			
	Can describe and assess the sustainability and effectiveness of the rainforest management strategies of: debt reduction			
Hot Deserts have a range of distinctive characteristics.	The broad locations of Hot Deserts and USA western desert in particular			
	The climate of Hot Deserts			
	Know what the soils of the hot deserts are like and why			
	Can describe relationships between climate, soils, plants, animals and people.			
	Explain how plants have adapted to the hot desert			
	Explain how animals have adapted to the hot deserts			
	Know what biodiversity is and why it is important to project in Hot Deserts.			
Development of Hot Deserts creates opportunities and challenges.	For USA western desert know the following:			
	•• factual information on development opportunities in Hot Deserts for: mineral extraction			
	•• factual information on development opportunities in Hot Deserts for: tourism			
	•• factual information on development opportunities in Hot Deserts for: energy			
	•• challenges of developing Hot Deserts such as: extreme temperature, inaccessibility, provision of buildings and infrastructure.			
Hot Deserts are at risk from economic development.	Can describe the value of Hot Deserts as wilderness areas and why these fragile environments should be protected.			
	Can describe and assess the effectiveness strategies to balance economic growth and conservation such as: use of technology, : role of governments,			
Desertification	To know the human and physical causes of desertification			
	To be able to describe and evaluate a range of strategies to cope with and mitigate desertification stone contours and Great Green Wall and how these increase sustainable food and reduce the development gap			
	To know the location of areas at risk of desertification and how this increases the development gap			