Geography IGCSE. Section A

Section A is worth 50 marks and therefore must be given about 45 to 50 mins. You must complete two topics for **Section A** from a choice of:

1. River Environments
2. Coastal Environments
3. Hazardous Environments

Case study information must be learned in detail – the location, the names of places, facts and figures.

Coastal Environments

1. How are the coastal landforms, such as beaches and stacks, formed over time by the coastal processes of erosion and deposition?

What to make notes about	Notes completed
Coastal Processes How do marine processes change the shape of the coast and create landforms and erode the coast backwards - coastal retreat? You must know how the following work: Wave action - the differences between constructive and destructive waves The processes of erosion – HAC + Attrition. The processes of deposition and transportation - longshore drift The processes of sub-aerial weathering and mass movement e.g. cliff slumping. **Page 33 to 35**	
Landforms created by the processes of erosion How are the following erosional landforms formed over time - headlands and bays; cliffs; wave-cut platforms; caves; arches, stacks and stumps ? **Page 35 to 37**	
Landforms created by the processes of deposition How are the following depositional landforms formed over time - beaches, spits, bars? **Page 37 to 39**	
The impact of geology How does the concordant and discordant geology of harder and softer rocks affect the shape of a coast and the landforms that can be formed along it? **Page 35.** You must know a small case study for this - the Dorset coastline near to Swanage on the south coast of the UK.	
Sea level change How have sea-level changes in the past affected the landform features found along a coastline? You need to know about rias, raised beaches etc. **Page 41**	
How vegetation begins to grow on sand dunes You need to know how plants slowly begin to grow on beach dunes and there is a clear succession. **Page 47**	
The impacts of human activities How do human activities affect how the coast changes? e.g. where settlements are built, factories, ports, can all affect coastal processes. So can coastal management. **Page 42.**	

2. What are the different coastal ecosystems like (coral reefs, mangroves, sand dunes, salt marshes)?

What to make notes about	Notes completed
For each of the ecosystems you need to know : • Where they are throughout the world – their global distribution. • What they are like – physical characteristics, species, biodiversity. • How they are valuable to people • How they are under threat of destruction by tourism and other developments such as industrialisation, agricultural practices, deforestation	
You must know the case study of at least one ecosystem. You have a choice of coral reefs in St. Lucia, West Indies, **page 49**, or the Great Barrier reef, Australia. Salt marshes in Southampton Water UK. **Page 55**. Mangroves in Bangladesh, **page 51**.	

3. How can the physical processes of erosion and human activities damage coastal environments? How can coastlines be managed so that their environments are sustainable and conflicts between users of the coast are minimized?

What to make notes about	Notes completed
The coastline of many countries is under pressure from lots of users – ports, industry, housing, tourism, etc etc. How do conflicts between different users of the coast and between development and conservation occur? **Page 54 - 58**	
The rapid erosion of some coastlines is a major problem. What are the causes of rapid coastal retreat? What are the different methods of protecting a coast – the hard and soft engineering options? What are the advantages and disadvantages of each? What kinds of places are different techniques suited to? How does the coastal management system called 'managed retreat' work? What kinds of places should it be used? **Page 58 - 60**	
Why do different groups of people e.g. conservationists, developers, tourism, industry, people, home owners and so on have different opinions about how the coastline should be managed?	
What are Shoreline Management Plans? They are needed because the coast is a system and no one area can be managed without consequences for another area of the coast. What is the coastal system? **Page 54 and 60**	
Case study of a retreating coastline – causes, impacts and management. Use the Holderness coast example in north east England, UK. **Page 58.**	