**`Exam Questions for A2 Level Geography**

**Tectonics**

**Name one stage of the hazard management cycle. (1)**

**Explain two strategies that are used to modify vulnerability to volcanic hazards. (4)**

**Using a named location, explain how hydrometeorological hazards can contribute to a tectonic disaster. (6)**

**Assess how prediction can contribute to the management of tectonic hazards. (12)**

**Explain two reasons why the number of reported earthquakes has risen since 1960. (4)**

**Explain the causes of tsunamis. (6)**

**Assess the significant of earthquake hazard profiles in relation to the effectiveness of management strategies. (12)**

**Assess the importance of governance in the successful management of tectonic mega-disasters (12)**

**Assess the importance of tectonic hazard profiles in understanding the severity of impacts resulting from earthquake events (12)**

***Identify one process that occurs only at destructive plate boundaries (1)***

***Explain two secondary hazards caused by earthquakes (4)***

***Explain the tectonic hazards that may result from volcanic activity (6)***

***Assess whether development and governance are the most important factors in understanding the scale of tectonic disasters (12)***

*Define what is meant by disaster (1)*

*Explain two reasons how a government might influence a community’s resilience. (4)*

*Explain why some earthquakes generate secondary hazards. (6)*

*Assess the factors that contribute to increased impacts from some tectonic hazard events. (12)*

Explain the reasons why volcanoes are more likely along some plate margins than others (6)

Assess the contribution of plate-tectonic theory to our knowledge of the Earth’s structure (12)

Explain the causes of one earthquake. (6)

Assess the relative importance of the hazards associated with destructive plate margins. (12)

Explain the hazards cause by one volcanic eruption. (6)

Assess the range of hazards caused by explosive volcanic eruptions. (12)

Explain the formation of a tsunami. (6)

Assess the severity of the various impacts of tsunami. (12)

Assess the reasons why, even within a country, some people are more vulnerable to hazards than others. (12)

Assess the relative importance of the concept of vulnerability in understanding hazards impacts. (12)

Explain the impacts of one major tectonic disaster. (6)

Assess the extent to which a country has been able to meet the pressures placed upon it by a major disaster. (12)

Explain why some disasters are economically costly, while others are more costly in terms of human lives. (6)

Assess the statement that ‘we are living in a more hazardous world’. (12)

Assess the vulnerability of one named country to natural hazards. (12)

Assess the extent to which hydrometeorological hazards can produce very similar impacts to hazards with tectonic causes. (12)

Explain the value of Park’s hazard-response curve in understanding the management of the impacts of tectonic hazards. (6)

Assess the usefulness of theoretical frameworks in understanding the prediction, impact and management of tectonic hazards. (12)

Assess the value of hazard-mitigation strategies. (9)

*With reference to earthquake waves, explain two reasons why it is difficult for buildings to remain intact during an earthquake event. (4)*

*Explain the link between plate boundary type and the strength of earthquake waves (4).*

*Explain the geographical criteria that can be used to decide if a tectonic event is a hazard, disaster or mega-disaster. (6)*

*Explain the correlation between the magnitude and intensity scales used for measuring earthquakes and their secondary hazards. (4)*

*Compare the tectonic hazard impacts in developed countries with those in developing / emerging countries. (6)*

*Explain how emergency planners and engineers may help to modify the impacts of a tectonic hazards. (6)*

*Explain why insurance companies may be interested in encouraging the accurate prediction of, and effective preparation for, a tectonic hazard. (4)*

*Assess the reasons why earthquakes create more disasters than volcanic eruptions (12)*

*Assess the relative importance of the physical characteristics of volcanic eruptions in creating risk for people (12)*

**Coasts**

**Explain two process in the formation of offshore bars. (4)**

**Explain how geological structure affects the development of coastal landforms. (6)**

**Assess the importance of lithology in influencing the rate of coastal erosion. (12)**

**State one coastal depositional landform.**

**Suggest one eustatic factor that might have influenced the changes shown in Figure 5. (3)**

**Explain two local factors that increase flood risk for low-lying islands. (4)**

**Explain the physical processes involved in a sediment cell system. (6)**

**Assess whether storm surges pose an increasing risk for some coastlines. (12)**

**Explain how the sediment cell concept contributes to the understanding of coastal systems (8)**

**Evaluate the contribution that changes in sea level make to the formation of coastal landscapes (20)**

**Explain how sub aerial processes contribute to the development of landscapes (6)**

**Explain why hard engineering approaches are still used to protect some coastal environments (8)**

**Evaluate the view that climate change is the most important factors in influencing coastal flood risk (20)**

***State one factor that affects coastal sediment transport (1)***

***Suggest one reason why the wave frequency differs at two locations (3)***

***Explain two coastal depositional processes (4)***

***Explain the factors that create an erosional coastline (6)***

***Assess whether sustainable management schemes are always the most appropriate for managing the risks to coastlines (12)***

*Name one erosion process that occurs at a coast (1).*

*Assess the importance of mass movement in influencing the rate of coastal recession and landform change. (12)*

*Evaluate the extent to which all coastlines can be protected using sustainable management approaches. (12)*

*Explain how geological structure influences the development of coastal landforms. (8)*

Using examples, explain the characteristics of high-energy coastlines, (6)

Referring to examples, explain the problems of classifying coastlines. (8)

Explain the relationship between geology and coastal form along one named stretch of coast. (6)

Assess the extent to which rates of coastal recession and stability depend on lithology. (12)

Compare constructive and destructive waves. (4)

Explained how different wave types result in different beach profiles. (6)

Explain two processes or erosion that increase in importance during storms. (6)

Assess the importance of different erosion processes in the development of cliff features. (12)

Explain the characteristics of a ‘drift-aligned’ stretch of beach. (6)

Assess the relative importance of depositional processes along a named stretch of coast. (12)

Assess the relative importance of different methods of mass movement along one stretch of coast. (12)

Explain the difference between eustatic and isostatic change. (4)

Assess the contribution of geologically recent eustatic changes to the UK’s coastal landscapes. (12)

Assess the relative importance of factors which have led to rapid coastal erosion along a stretch of coastline. (12)

Explain the physical and human causes of one flood in a developing country. (8)

Evaluate the influence of a country’s level of development in determining the impacts of coastal flooding. (12)

Assess the effectiveness of hard-engineering approaches designed to protect the coast from erosion. (12)

Evaluate the effectiveness of coastal-management strategies along a stretch of coast. (12)

Assess the effectiveness of holistic strategies used to protect a stretch of coast from erosion. (12)

*Explain how geology is an important influence on the shape (morphology) and features of a coastline. (6)*

*Explain how vegetation can bring stability to low-energy coastlines (6)*

*Explain the difference between low-energy and high-energy coastal environments. (6)*

*Explain why coastal processes may vary from day to day. (6)*

*Explain the formation of a cuspate foreland. (6)*

*Explain how local factors may increase the risk of coastal flooding. (6)*

*Explain the impact of storm surges on lowland coastal areas. (8)*

*Explain the possible social impacts of coastal recession on coastal communities. (6)*

*Explain why UK Government coastal management policies vary from place to place (6)*

*Assess the benefits of soft engineering approaches when managing threatened coasts (12)*

*Evaluate the threats for lowland coastal areas arising from future SLR (12)*

*Assess the severity of the various impacts of tsunami. (12)*

**Water**

**Explain why river regimes might vary between basins. (6)**

**Explain how physical and human factors contribute to an increased risk of water**

**insecurity. (8)**

***Assess the likely impacts of changing precipitation on the hydrological processes***

***in the drainage basins shown. (12)***

***Evaluate the view that some approaches to managing water insecurity are more***

***sustainable than others. (20)***

*Explain the impact climate type can have on soil water availability. (6)*

***Explain how climate change might have significant impacts on the operation of the water cycle. (8)***

*Assess the extent to which some approaches to future water supply management are more sustainable than others. (12)*

*Evaluate the extent to which conflicts might occur between users within a country, and internationally, over the use of water and energy. (20)*

**Explain how the global hydrological cycle operates as a closed system. (6)**

**Explain why a drainage basin can be regarded as an open system. (6)**

**Using examples assess the extent to which the hydrological cycle can influence river systems at a local level. (12)**

**Using examples assess ways in which deficits within the hydrological system can have significant impacts. (12)**

**Using examples assess the extent to which human activities can exacerbate flood risk. (12)**

Using examples assess the impacts that climate change may have on the hydrological cycle. (12)

Evaluate the extent to which water insecurity is the result of physical or human cause. (20)

Assess the risks associated with water insecurity. (12)

Assess the effectiveness of strategies designed to make water use more sustainable. (12)

***Explain the meteorological causes of river flooding. (8)***

*Explain why there is an increasing global demand for water. (8)*

*Explain the advantages and disadvantages of a sustainable water management scheme. (6)*

***Assess the significance of environmental and economic impacts caused by river floods. (12)***

*Evaluate the contribution of large-scale schemes to increasing water security. (20)*