**Hazards and Disasters Learning Objectives**

**Characteristics of hazards**

* Explain the characteristics and spatial distribution of the following hazards.
  + - * Either earthquakes or volcanoes
      * Hurricanes (tropical cyclones, typhoons)
      * Droughts
      * Any one recent human‑induced (technological) hazard (explosion or escape of hazardous material)
* Distinguish between the chosen hazards in terms of their spatial extent, predictability, frequency, magnitude, duration, speed of onset and effects.

**Vulnerability**

* Explain the reasons why people live in hazardous areas.
* Discuss vulnerability as a function of demographic and socio‑economic factors, and of a community’s preparedness and ability to deal with a hazard event when it occurs.
* Explain the reasons for some sectors of a population being more vulnerable than others.

**Analysis of risk**

* Examine the relationships between the degree of risk posed by a hazard and the probability of a hazard event occurring, the predicted losses and a community’s preparedness for it.
* Explain the reasons why individuals and communities often underestimate the probability of hazard events occurring.
* Discuss the factors that determine an individual’s perception of the risk posed by hazards.
* Examine the methods used to make estimates (predictions) of the probability (in time and space) of hazard events occurring, and of their potential impact on lives and property.
* Discuss these methods by examining case studies relating to **two** different hazard types.

**Disasters**

* Distinguish between a hazard event and a disaster.
* Explain why this distinction is not always completely objective.
* Describe the methods used to quantify the spatial extent and intensity of disasters.
* Explain the causes and impacts of any **one** disaster resulting from a natural hazard.
* Explain the causes and impacts of any **one** recent human‑induced hazard event or disaster.
* Examine the ways in which the intensity and impacts of disasters vary in space and have changed over time.

**Adjustments and responses to hazards and disasters**

* Discuss the usefulness of assessing risk before deciding the strategies of adjustment and response to a hazard.
* Describe attempts that have been made to reduce vulnerability by spreading the risk (aid, insurance) and by land-use planning (zoning).
* Describe strategies designed to limit the damage from potential hazard events and disasters.
* Describe the range of responses, at the community, national and international levels, during and after a hazard event or disaster.
* Distinguish between rescue, rehabilitation and reconstruction responses.
* Explain how these responses are affected by individual and community perceptions.
* Examine the factors that affected the choice of adjustments before, and responses to, actual hazard events or disasters.
* Discuss the importance of re‑assessing risk, and re‑examining vulnerability, following any major hazard event or disaster.

Past 6 mark questions

Explain the reasons for the occurrence and severity of a specific drought event that you have studied.

Suggest **three** reasons why some people continue to live in places with a known hazard risk.

Analyse **three** ways in which communities can reduce the impact of drought.

Explain **three** factors that affect the way that people perceive hazards.

Explain the conditions needed for the occurrence of a hurricane hazard event.

Analyse why communities may underestimate the probability of a hazard event occurring.

Explain why some sections of a community are more vulnerable to hazards than others.

Past 10 mark questions

Compare the effectiveness of the methods used to predict the occurrence of **two** different natural hazard types.

For **one or more** hazards of your choice, examine how estimates are made for the probability and likely impact of a major hazard event.

Examine the different types of responses that occurred during **and** after a named disaster. (Do **not** refer to technological hazards in your answer.)

“Rich countries experience hazard events while poor countries experience disasters.” Discuss this statement with reference to **one** named hazard type.

Examine the impact of a recent human-induced (technological) hazard event

“Hazard preparedness is more important than hazard prediction.” Discuss this statement with reference to any **one** hazard other than drought.

“Economic factors and not physical factors determine the severity of the impacts of hurricanes (typhoons, cyclones).” Discuss this statement using examples.

Referring to examples, examine why the geographic impacts of disasters vary in space and time.

Using examples, evaluate the success of adjustment and response strategies for a named hazard type.