# GCSE Geography: 50 Questions

| | Question | Suggested Answer / Guidance |
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| 1 | What is a natural hazard? | A naturally occurring event that threatens people, property or the environment. |
| 2 | What is the difference between a natural hazard and a disaster? | A hazard is a potential threat. A disaster occurs when it causes significant damage, deaths or disruption. |
| 3 | Suggest one factor that affects the risk that hazards pose | The wealth of a country; population density; geographical location. |
| 4 | What is meant by a tectonic hazard? | A hazard caused by movements of the Earth's crust, such as earthquakes and volcanoes. |
| 5 | Outline the sequence of tropical storm formation and development | Warm ocean water heats the air, causing it to rise. Low pressure develops, water vapour condenses, energy is released, and the storm strengthens. |
| 6 | How are volcanic eruptions related to plate margins? | Most volcanoes form at plate margins where magma rises through weaknesses in the Earth's crust. |
| 7 | What physical processes take place at destructive plate boundaries? | Plates move together and the denser plate is forced beneath the other in a process called subduction. |
| 8 | What physical processes at a constructive plate boundaries? | Plates move apart and magma rises to fill the gap, creating new crust. |
| 9 | What are the primary effects of an earthquake? | Immediate impacts such as deaths, injuries, collapsed buildings and damaged roads. |
| 10 | What are the secondary effects of an earthquake? | Impacts that occur later, such as fires, landslides, tsunamis and homelessness. |
| 11 | How can prediction and protection reduce the risks from tectonic hazards? | Monitoring can provide warnings and earthquake-resistant buildings can reduce damage and casualties. |
| 12 | Why do people continue to live in areas at risk from volcanoes? | Reasons include fertile soils, tourism, jobs, geothermal energy and family ties. |
| 13 | What natural factors are causes of climate change? | Changes in the Earth's orbit, volcanic activity and variations in solar output. |
| 14 | How do greenhouse gases contribute to global warming? | They trap heat in the atmosphere, causing global temperatures to rise. |
| 15 | Describe one effect of climate change on people. | Rising sea levels can flood homes and force people to relocate. |

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| 16 | Suggest one mitigation strategy for managing climate change. | Using renewable energy instead of fossil fuels to reduce greenhouse gas emissions. |
| 17 | Suggest one adaptation strategy for managing climate change. | Building flood defences to protect communities from rising sea levels. |
| 18 | What is an ecosystem? | A community of living organisms interacting with each other and their environment. |
| 19 | What is the difference between a biotic and an abiotic component? | Biotic components are living (plants, animals); abiotic components are non-living (water, rock, air). |
| 20 | What is a food chain? | A sequence showing how energy passes from one organism to another. |
| 21 | What is biodiversity? | The variety of plant and animal species within an ecosystem. |
| 22 | What are the main characteristics of a tropical rainforest? | Hot and wet all year, with high biodiversity and dense vegetation. |
| 23 | Why are tropical rainforests important globally? | They store carbon, regulate climate and support biodiversity. |
| 24 | Describe the nutrient cycle in a tropical rainforest. | Most nutrients are stored in the biomass and are rapidly recycled through decomposition. |
| 25 | What is deforestation? | The large-scale removal of trees from a forest. |
| 26 | Name two causes of deforestation. | Logging and cattle ranching. |
| 27 | Explain one environmental impact of deforestation. | Habitat loss reduces biodiversity because species lose their homes. |
| 28 | Suggest one way a tropical rainforest can be a sustainably managed? | Selective logging, where only certain trees are removed and the forest is allowed to recover. |
| 29 | What are the main characteristics of a hot desert ecosystem? | Very low rainfall, high temperatures, sparse vegetation and thin soils. |
| 30 | How are plants adapted to survive in the physical conditions in hot deserts? | They have waxy surfaces, spines instead of leaves and deep roots to reduce water loss. |
| 31 | How are animals adapted to survive in the physical conditions in hot deserts? | Many are nocturnal and conserve water by producing little sweat. |
| 32 | What opportunities do hot desert environments provide? | Tourism, farming, mineral extraction and solar energy development. |
| 33 | Suggest one strategy used to reduce the risk of desertification | Planting drought-resistant vegetation to stabilise the soil. |
| 34 | What is weathering? | The breakdown of rock in situ (without movement). |

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| 35 | What is the difference between mechanical and chemical weathering? | Mechanical weathering physically breaks rock apart, while chemical weathering changes rock through chemical reactions. |
| 36 | What is erosion? | The wearing away and removal of rock by moving water, wind or ice. |
| 37 | Name four types of coastal erosion. | Hydraulic action, abrasion, attrition and solution. |
| 38 | How is a wave-cut platform formed? | Waves erode the cliff base, causing collapse and cliff retreat, leaving a flat rocky platform. |
| 39 | Explain the formation of a headland and bay. | Softer rock erodes more quickly to form bays, while harder rock remains as headlands. |
| 40 | Describe the formation of a cave, arch, stack and stump. | Cracks are enlarged into caves, caves develop into arches, arch roofs collapse to form stacks, and stacks erode into stumps. |
| 41 | What is longshore drift? | The movement of sediment along the coast by waves approaching at an angle. |
| 42 | Name two coastal deposition landforms. | Beaches and spits. |
| 43 | What is the source of a river? | Where a river begins. |
| 44 | What is the mouth of a river? | The point where a river enters the sea, a lake or another river. |
| 45 | What are the characteristics of the upper course of a river? | A steep gradient, narrow channel, shallow depth and mainly vertical erosion. |
| 46 | How are waterfalls formed? | Softer rock erodes faster by hydraulic action and abrasion than harder rock, creating a step and plunge pool. |
| 47 | How are meanders formed? | Erosion occurs on the outside bend and deposition occurs on the inside bend due to faster current. |
| 48 | How are ox-bow lakes formed? | Deposition seals off the neck of a meander, leaving an isolated lake. |
| 49 | What is a floodplain? | A flat area of land beside a river that is regularly flooded. |
| 50 | Name two hard-engineering and two soft-engineering river flood management strategies. | Hard engineering: dams and channel straightening. Soft engineering: floodplain zoning and flood warnings. |