You need to know

- In this section you’ll learn how to maximise marks on 4-mark questions.

Study Figure 1. It shows a house damaged by Cyclone Haiyan in a rural area of the Philippines in 2013

Using the image and your own knowledge, suggest why typhoons have such a big impact in countries like the Philippines. [4 marks]

1. Plan your answer

Before attempting to answer the question, remember to BUG it. That means:

- Box the command word.
- Underline the following:
  - the theme
  - the focus
  - any evidence required
  - the number of examples needed.
- Glance back over the question – to make sure you include everything in your answer.
- Use the BUG below to plan your own answer.

Evidence: Support your answer with information from the photo, AND from your own knowledge. You must do both to get 4 marks.

Command word: make intelligent reasoned interpretations

Using the image and your own knowledge, suggest two reasons why tropical storms have such a big impact on developing countries like the Philippines. (4 marks)

Focus and no. of examples: The question asks for two specific reasons about developing countries, so you must offer two, AND expand them with more detail.

PEEL your answer

Use PEEL notes to structure your answer. This will help you to communicate your ideas to the examiner in the clearest way. PEEL has four stages:

- Point – Make two points for this question. Use sentences, not bullet points.
- Explain – Give reasons for each point. Use sentence starters such as: ‘This is because ...’, ‘One reason is ...’.
- Evidence – Include facts and other details from named examples to back up each point.
- Link – To link the two points to each other, use PEE sentence starters such as: ‘A second way is ...’ or ‘Secondly ...’. You’ll learn more about how to do this on 6- and 9-mark questions.

Tip

Quality not quantity: You will not be marked simply on the number of points you make, but on the quality of your answer. That means the quality of the content and how well you structure your answer, collected by others (unfamiliar fieldwork data), cultural opportunities, as well as recreation and entertainment.

1. Write your answer

Using the image (Figure 1) and your own knowledge, suggest two reasons why tropical storms have such a big impact on developing countries like the Philippines. (4 marks)

1. ____________________________
2. ____________________________

5 steps to success

The following five steps are used in this chapter to help you get the best marks.

1. Plan your answer – decide what to include and how to structure your answer.
2. Write your answer – use the answer spaces to complete your answer.
3. Mark your answer – use the mark scheme to self- or peer-mark your answer. You can also use this to assess sample answers in step 4 below.
4. Sample answers – sample answers are given to show you how to maximise marks for a question.
5. Marked sample answers – these are the same answers that you use for step 4 above, but are marked and annotated, so that you can compare these with your own answers.
The challenge of natural hazards

Answer all questions in this section.

01.1 What is a natural hazard? [1 mark]

01.2 Give one example of each of the following types of natural hazard [3 marks]

<table>
<thead>
<tr>
<th>Atmospheric</th>
<th>Geological/tectonic</th>
<th>Hydrological</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
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</tbody>
</table>

01.3 Explain why people continue to live in areas that are at risk from a geological or tectonic hazard. [4 marks]

01.4 Using Figure 1, which two of the following statements are true? Shade two letters only.

A. Winds blow from low to high pressure.
B. High pressure is an area of sinking air.
C. The south-east trades blow in the northern hemisphere.
D. Surface winds are named after the direction they are blowing towards.
E. The UK lies in the westerlies wind belt.
F. Sinking air above the Equator forms the Hadley Cell.

[2 marks]

01.5 State two effects of the earth’s revolution around the sun on the pressure and wind belts shown in Figure 1. [2 marks]

1

2
The effect of climate change

A major threat to tropical rainforests is global warming. Rising populations and increasing resource consumption add greenhouse gases to the atmosphere, which causes the climate to change. Some scientists think global warming will lead to species extinction at an unprecedented rate.

The rainforest suffers from climate stress.

- During drought the forests stop absorbing carbon dioxide and emit it instead, because plants stop growing and therefore can no longer absorb the gas.
- Forest fires break out in the drought conditions, burning trees and releasing carbon dioxide.
- Leaf litter dries up so decomposer organisms die out, threatening the nutrient cycle.
- Leaves in the canopy die, reducing the availability of food which affects food webs.
- Deforestation makes droughts more common and more severe.
- With fewer trees, there is less evaporation and transpiration. This means there are fewer clouds and less rain.

<table>
<thead>
<tr>
<th>Temperature rise</th>
<th>Impact on species</th>
<th>Impact on biome</th>
</tr>
</thead>
<tbody>
<tr>
<td>3°C</td>
<td>20-50% of species face extinction</td>
<td>- Forest gets stressed by drought</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Increased danger of fire</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Flooding causes the loss of mangrove</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Pests and diseases thrive in rising temperatures</td>
</tr>
</tbody>
</table>

Causes of deforestation

- **Poverty:** in many LICs (low-income countries), local people cut down small areas of forest for land to farm because they have no other way of making a living.
- **Debt:** countries are driven to cut down forests, export timber or grow cash crops to pay off debts.
- **Economic development:** most tropical forests are in the developing world. In order to develop their economies, forest is sacrificed to be replaced by roads, expanding cities, and rivers dams for hydroelectric power (HEP) stations (see Figure 2).
- **Demand for resources:** tropical forests contain raw materials (see Figure 2). These include timber, but also oil, gas, iron ore and gold. To reach these resources, forest has to be destroyed. Land is also needed to feed growing populations.

Causes of deforestation in Amazonia

- Cattle 60%,
- Sub Agr 33%,
- Fires etc 3%,
- Logging 3%,
- Large scale comm. Agr 1%

Rates of deforestation in six countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Annual rate of deforestation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>-4.7</td>
</tr>
<tr>
<td>Nigeria</td>
<td>-3.1</td>
</tr>
<tr>
<td>Indonesia</td>
<td>-1.9</td>
</tr>
<tr>
<td>Malaysia</td>
<td>-0.7</td>
</tr>
<tr>
<td>Brazil</td>
<td>-0.6</td>
</tr>
<tr>
<td>Democratic Republic of Congo</td>
<td>-0.2</td>
</tr>
</tbody>
</table>