

Surname	Centre Number	Candidate Number
First name(s)		2



GCE AS/A LEVEL

2110U10-1



S25-2110U10-1

TUESDAY, 13 MAY 2025 – AFTERNOON

**GEOGRAPHY – AS unit 1
CHANGING LANDSCAPES**

2 hours

For Examiner's use only		
Question	Maximum Mark	Mark Awarded
Either 1 and 2 or 3 and 4	16	
	16	
	16	
	16	
5.	7	
6.	31	
7.	26	
Total	96	

ADDITIONAL MATERIALS

A calculator.

INSTRUCTIONS TO CANDIDATES

Use black ink or black ball-point pen. Do not use gel pen or correction fluid.

You may use a pencil for graphs and diagrams only.

Write your name, centre number and candidate number in the spaces at the top of this page.

Write your answers in the spaces provided in this booklet.

In Section A, answer **either** questions 1 and 2 **or** questions 3 and 4.

Answer **all** questions in Section B.

If further space is required you should use the additional page(s) at the back of this booklet. The question number(s) should be clearly shown.

INFORMATION FOR CANDIDATES

The number of marks is given in brackets [] at the end of each question or part-question; you are advised to divide your time accordingly.

This paper requires that you make as full use as possible of appropriate examples and reference to data to support your answers. Sketch maps and diagrams should be included where relevant.

A plain page is available near the back of the booklet for you to add any relevant sketch maps and diagrams you may wish to include. The question number(s) should be clearly shown.



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Section A: Changing Landscapes

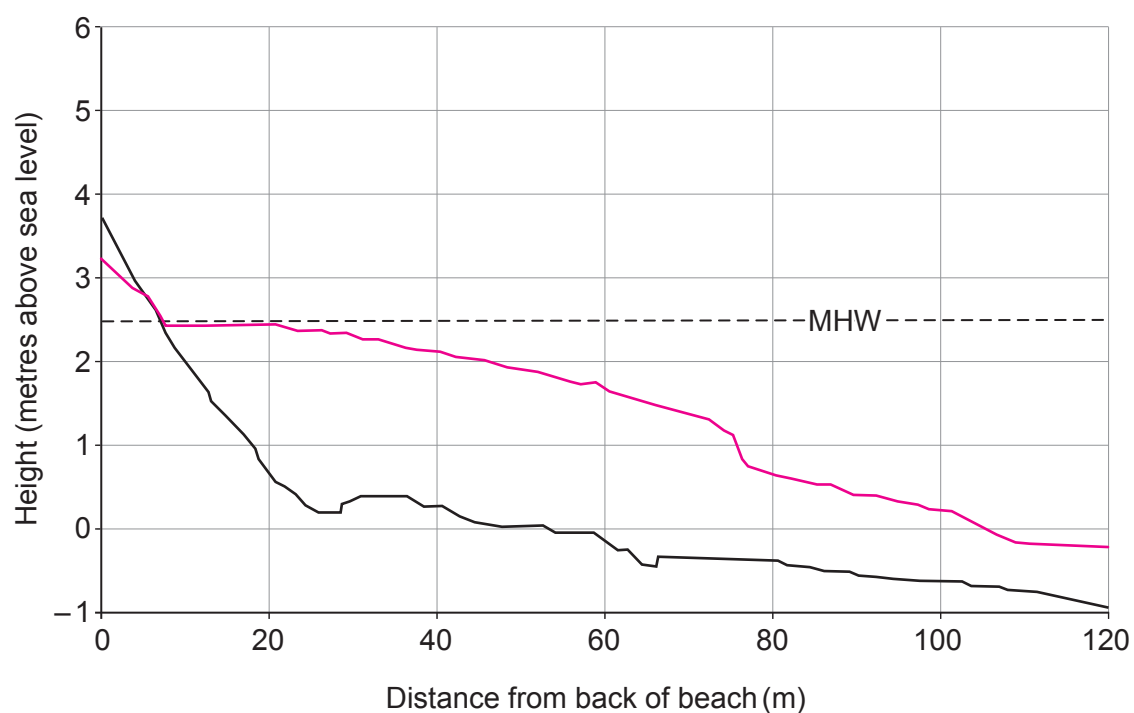
Answer **either** questions 1 and 2 **or** questions 3 and 4 from your chosen landscape.

Make the fullest possible use of examples and data to support your answers.

Either: Coastal Landscapes

Answer questions 1 **and** 2 if this is your chosen landscape.

Figure 1: Changes to the beach profile between Year 1 and Year 2, Gâvres, France



Key: — Year 1 — Year 2
MHW – Mean high water mark

Adapted from: Science Direct



1. (a) (i) Use **Figure 1** to compare the beach profiles in Year 1 and Year 2. [5]

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- (ii) Suggest **one** reason for the changing beach profile in **Figure 1**. [3]

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(b) Examine the role of biotic processes in the formation of **one** coastal landform.

[8]

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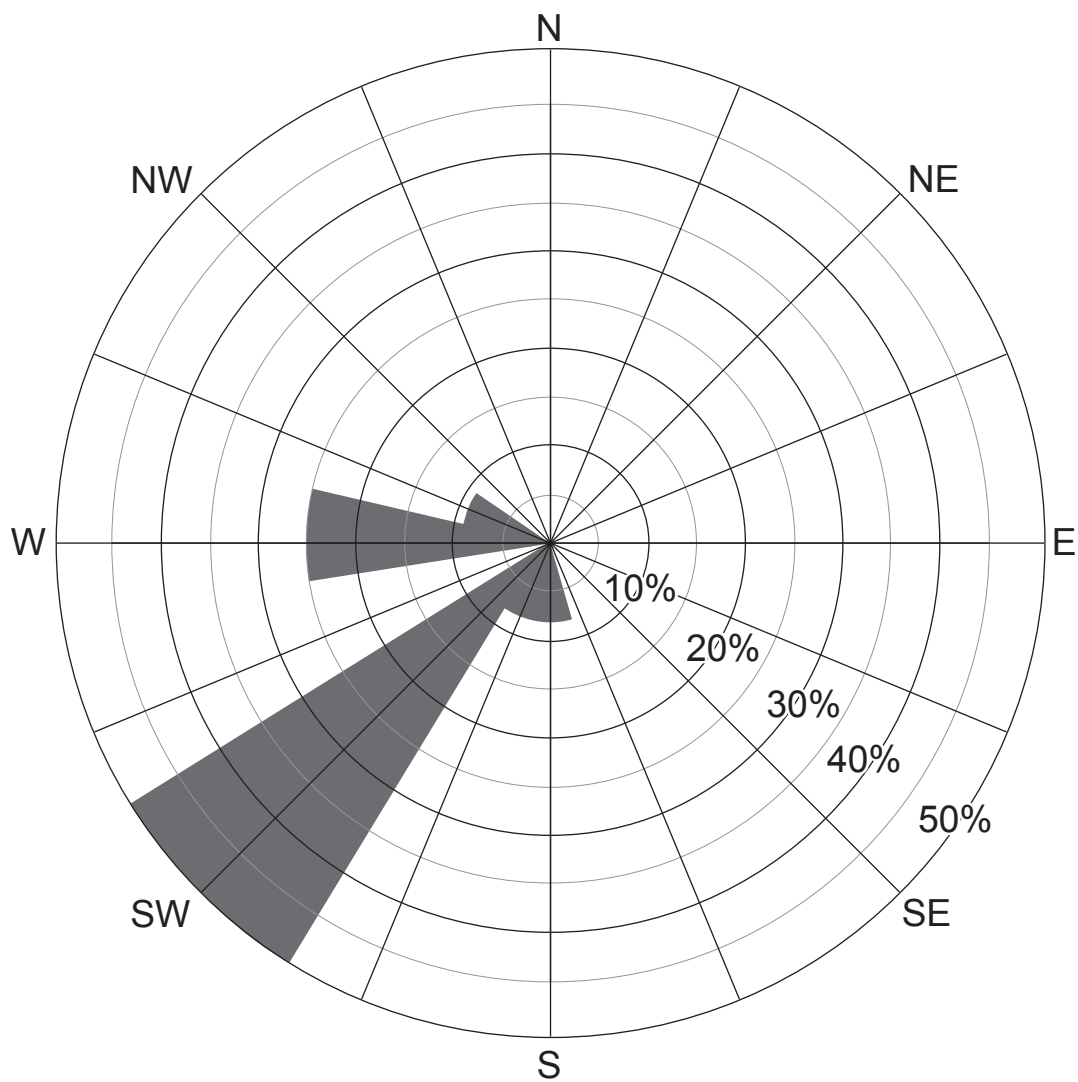
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Figure 2: Rose diagram to show annual wave direction at Rhyl Flats Offshore Wind Farm, Wales

The rose diagram shows the percentage of waves coming from different directions over a 1-year period.



Source: coastalmonitoring.org



2. (a) (i) Use **Figure 2** to analyse the pattern shown.

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(ii) Suggest **one** reason for the pattern shown in **Figure 2**.

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- (b) Assess the success of **one** strategy used to manage the impacts of human activity on coastal processes and landforms. [8]

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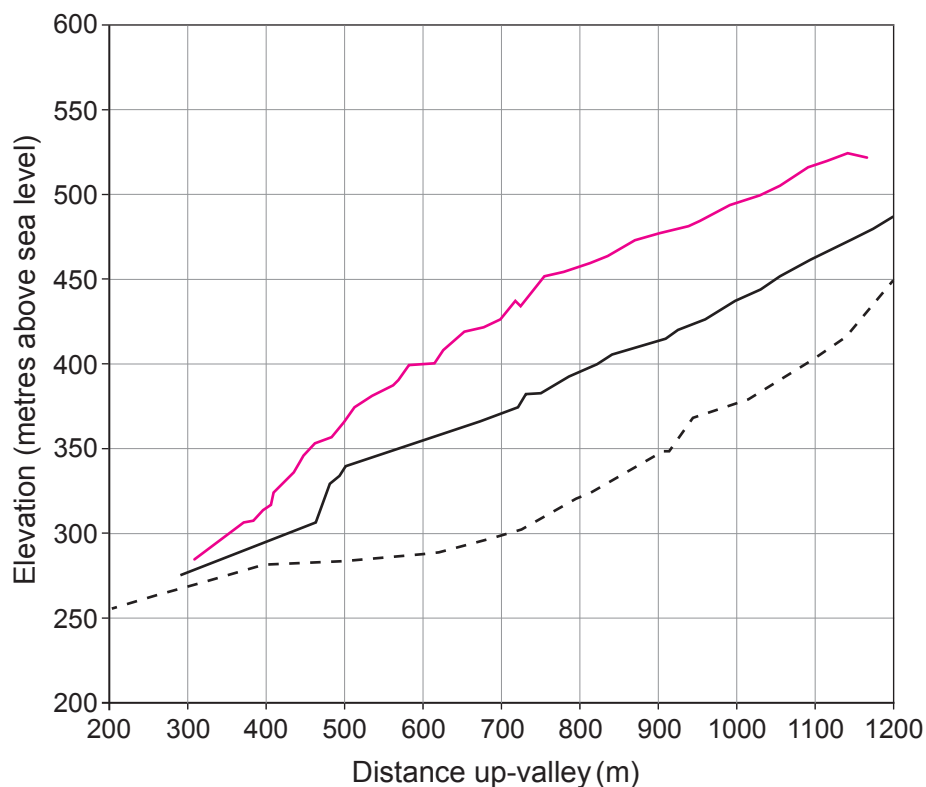
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Or: Glaciated Landscapes

Answer questions 3 **and** 4 if this is your chosen landscape.

Figure 3: Changes in ice thickness over a 4-year period, Franz Josef glacier, New Zealand



Key: — Glacier surface Year 1 — Glacier surface Year 4 - - - Bedrock

Adapted from: <https://www.researchgate.net>



3. (a) (i) Use **Figure 3** to compare ice thickness in Year 1 and Year 4.

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- (ii) Suggest **one** reason for the changing ice thickness shown in **Figure 3**.

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(b) Examine the role of different processes in the formation of one fluvioglacial landform.

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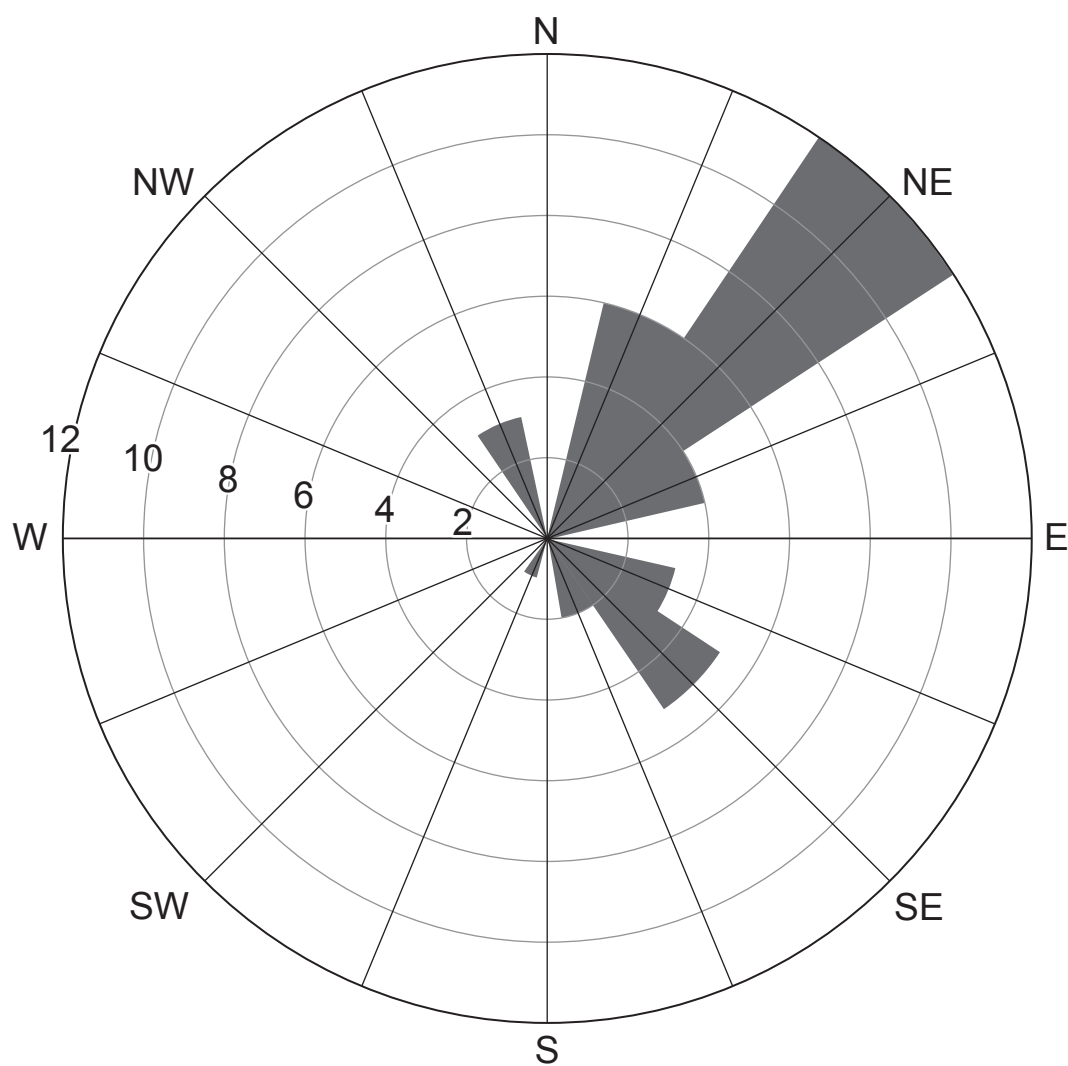
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Figure 4: Rose diagram to show cirque orientation, Lake District, England

The rose diagram shows the number of cirques facing in different directions in the Lake District.



Total number of cirques = 36

Source: Collard, R. (1988) *The Physical Geography of Landscape*



4. (a) (i) Use **Figure 4** to analyse the pattern of cirque orientation. [5]

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- (ii) Suggest **one** reason for the pattern shown in **Figure 4**. [3]

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- (b) Assess the success of **one** strategy used to manage **either**;
the impact of human activity on glacial processes and landforms
or
the impacts of glacial processes and landforms on human activity. [8]

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Section B: Tectonic Hazards

Answer **all** questions.

Make the fullest possible use of examples and data to support your answers.

Figure 5a: Global earthquake data, 2022

Magnitude	Number of earthquakes
9+	0
8.0-8.9	0
7.0-7.9	11
6.0-6.9	117
5.0-5.9	1603
4.0-4.9	13707

Figure 5b: Earthquake deaths, 2022

Total global deaths 2022: 1288

Deadliest earthquake:
Afghanistan, 22 June 2022
Magnitude: 6.3
Deaths: 1107

5. (i) Use **Figure 5a** to describe the relationship between earthquake magnitude and number of earthquakes. [2]

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- (ii) Describe **one** data presentation method suitable for presenting the data on number of earthquakes in **Figure 5a**. [2]

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- (iii) Use **Figure 5b** to calculate the percentage of total global deaths due to the Afghanistan earthquake. Show your working and give your answer to **one** decimal place. [3]

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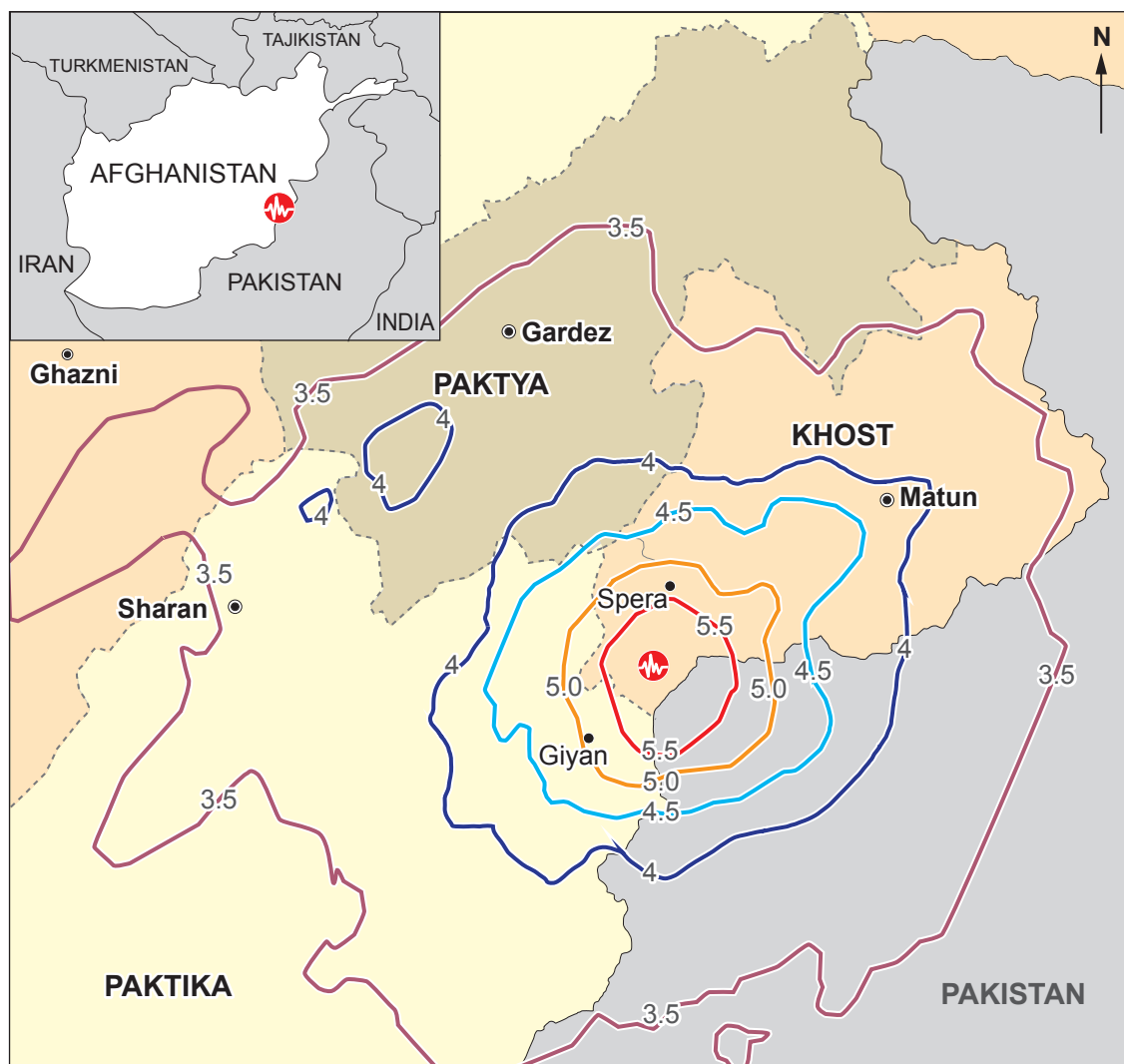
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Figure 6a: Earthquake intensity, east Afghanistan, June 2022



Key:

Intensity	Description
5.5	very strong
5	strong
4.5	moderate
4	moderate
3.5	light

Epicentre

City

Village

--- border of province

0 50 km
scale

Adapted from: www.unocha.org



6. (a) Use **Figure 6a** to describe the pattern of earthquake intensity across east Afghanistan.

[5]

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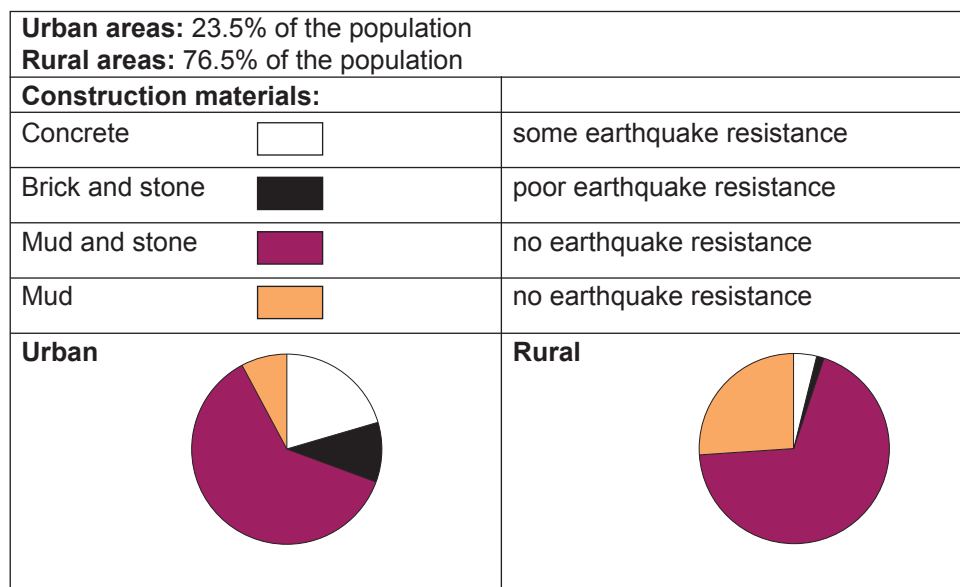
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Figure 6b: Construction materials used for buildings in Afghanistan

Source: Afghanistan Housing Profile-11October2017.pdf (unhabitat.org)

Figure 6c: Quote from Al Jazeera, 22 June 2022

“The biggest issue is how to reach the (rural) sites. Nestled in rocky, unpaved mountains, they are further away from the capital cities and the road conditions can be difficult. The remoteness of these poor villages and their homes of mud and wood were cited as a major cause of the fatalities.

Residents in remote (rural) areas in the East searched for victims by digging with their bare hands through the rubble.



It was not clear if heavy rescue equipment was being sent, or if it could even reach the area. With only a handful of airworthy planes and helicopters, any immediate response to the latest catastrophe is limited. Flights had to be halted due to torrential rain, hail and cloud.”

Source: At least 1,000 killed after strong earthquake jolts Afghanistan | News | Al Jazeera



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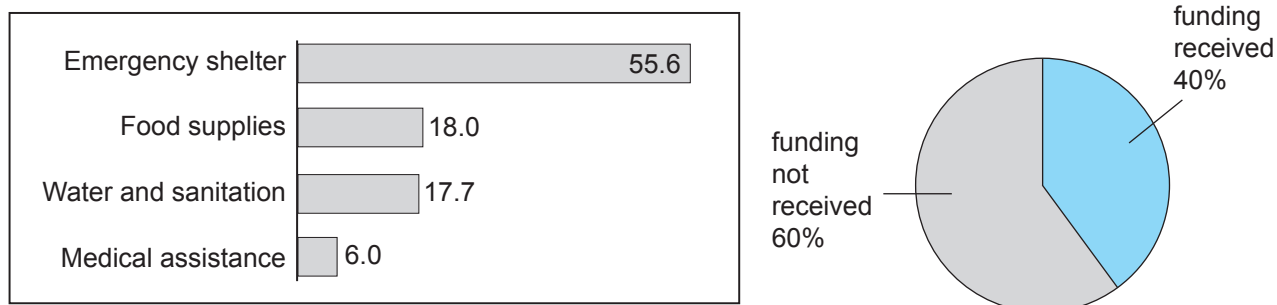


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Figure 6d: Funding (US\$ million) required for recovery from the Afghanistan earthquake, 17 July 2022



Source: UNOCHA ocha_sitrep_no.1_earthquake_response_17jul2022_final.pdf

Figure 6e: Data on progress of recovery, July and September 2022

Response	% people in need that received help	
	17 July 2022	30 September 2022
Emergency shelter (tents)	12	96
Food supplies	19	34
Treatment for malnourished children	6	77
Water treatment kits	19	100
Medical assistance (disease prevention)	17	28

Source: UNOCHA OCHA_SitRep_Earthquake_Response_3Nov2022.pdf

(c) Use **Figure 6d** and **Figure 6e** to analyse the success of the recovery effort. [7]

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- (d) Use **Figures 6a to 6e** to examine the relative importance of the physical and human factors which affected the response to this earthquake. [10]



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7. (a) Outline how quality of governance may influence vulnerability to tectonic hazards. [8]

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(b) Explain why the characteristics of Earth's mantle result in plate movement.

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