Surname	Centre Number	Candidate Number
Other Names		2

GCE AS/A LEVEL – NEW

2110U10-1

S17-2110U10-1

GEOGRAPHY – AS unit 1
CHANGING LANDSCAPES

TUESDAY, 16 MAY 2017 – AFTERNOON

2 hours

For Examiner's use only		
Question	**Maximum Mark**	**Mark Awarded**
1.	**16**	
2.	**16**	
3.	**16**	
4.	**16**	
5.	**22**	
6.	**24**	
7.	**18**	
Total	**96**	

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ADDITIONAL MATERIALS

A calculator.

INSTRUCTIONS TO CANDIDATES

Use black ink or black ball-point pen.

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 additional space is required you should use the continuation pages at the end 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 at the end of the section for you to add any relevant sketch maps and diagrams you may wish to include.

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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.

Coastal Landscapes

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

Figure 1: Mass movement at West Bay, Dorset

Source: NPAS Exeter

1. *(a)* (i) Use **Figure 1** to suggest how mass movement is influencing the development of this coastal landscape. [5]

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(ii) Explain why wave fetch may affect the erosion of this coastal landscape. [3]

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(b) Explain why wind is important in the formation of coastal sand dunes. [8]

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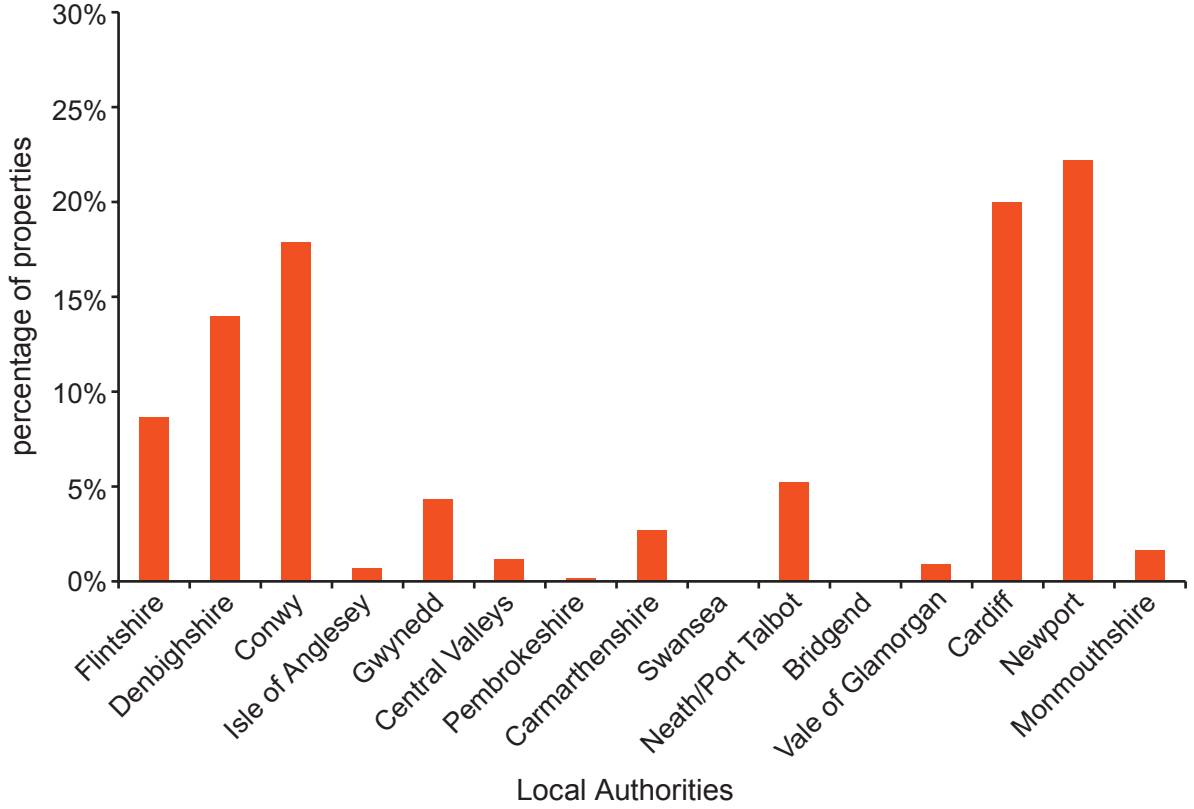
Figure 2: Properties at risk from coastal erosion and flooding in the January 2014 storm in Wales



Source: www.naturalresources.wales

2. *(a)* (i) Use **Figure 2** to describe variations in the percentage of properties at risk from coastal erosion and flooding. [5]

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(ii) Suggest **one** social loss associated with coastal erosion. [3]

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(b) Examine the success of **one** management strategy used to manage the impacts of coastal processes on human activity. [8]

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Glaciated Landscapes

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

Figure 3: Llanberis Pass

Photographer: David Flett

3. *(a)* (i) Use **Figure 3** to suggest how this glacial landscape has been modified since the ice retreated. [5]

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(ii) Suggest **one** way in which ice thickness could have affected glacial erosion in this landscape. [3]

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(b) Compare **two** processes of glacial erosion. [8]

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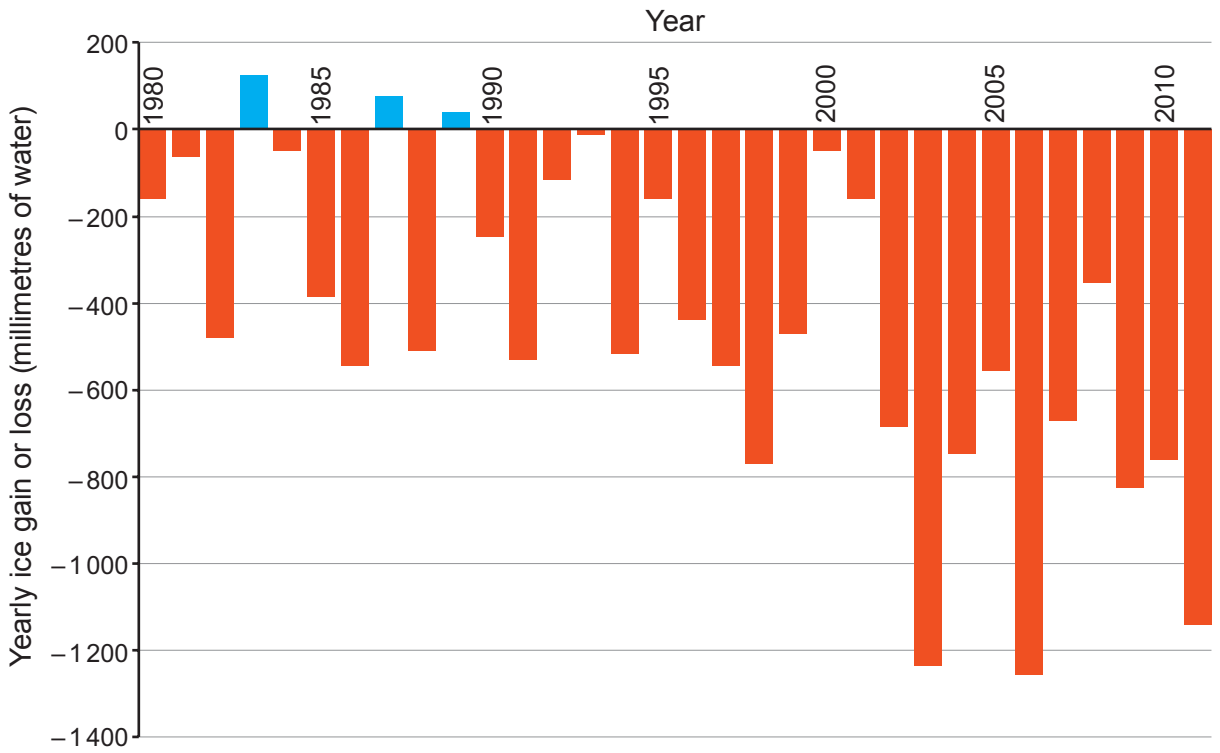
Figure 4: Global glacial budget 1980-2011



Source: www.wgms.ch

4. *(a)* (i) Use **Figure 4** to describe the trends in the global glacial budget. [5]

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(ii) Explain why there are seasonal variations in ablation within the glacial budget. [3]

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(b) Examine the formation and characteristics of **one** fluvioglacial landform. [8]

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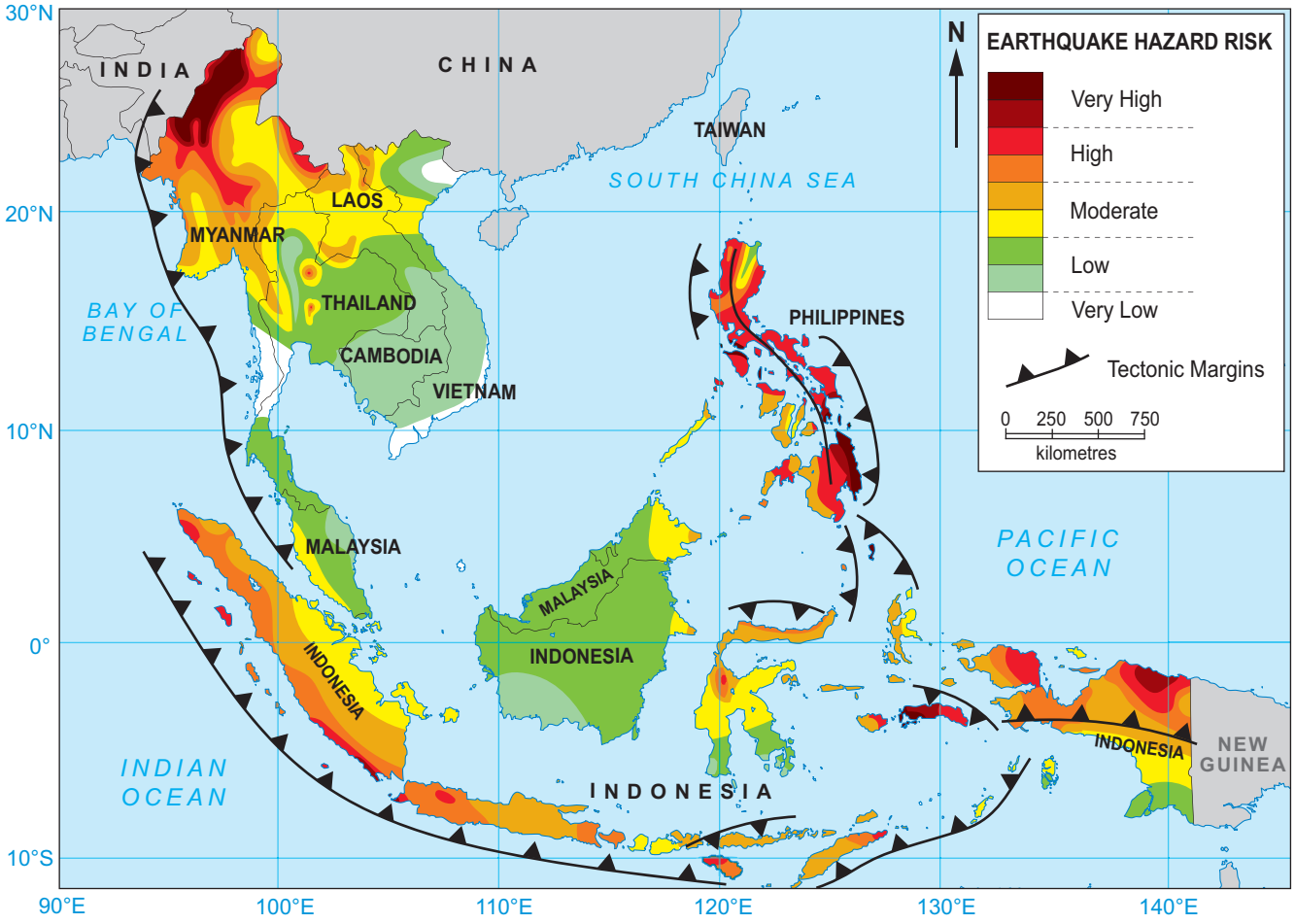
Section B: Tectonic Hazards

Answer **all** *questions.*

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

Figure 5: Earthquake hazard map of South East Asia



Source: www.unisdr.org

5. *(a)* (i) Use **Figure 5** to describe the distribution of high and very high earthquake hazard risk in South East Asia. [5]

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(ii) Examine the relationship between the location of tectonic margins and the level of earthquake hazard risk in South East Asia. [9]

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(b) Outline how earthquakes produce (i) liquefaction and (ii) landslides. [8]

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Figure 6a: Impacts of the 2013 earthquake on the Philippine island of Bohol (as of 18.10.13)

Municipality	Dead and missing people	Destroyed buildings
Antequera	17	3000
Bilar	4	0
Buenavista	2	35
Calape	4	0
Catigbian	5	2316
Getafe	1	15
Inabanga	4	231
Loon	59	162
Maribojoc	14	0
Sagbayan	15	2
Tubigon	10	0
TOTAL	135	5761

Source: www.reliefweb.int

6. *(a)* (i) Identify the mode for the dead and missing people. [1]

Mode: .....

(ii) Calculate the interquartile range for the dead and missing people. Show your workings. [4]

Interquartile Range: .....

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(b) Suggest possible reasons why there is a variation in the number of destroyed buildings between the selected municipalities of Bohol shown in **Figure 6a**. [10]

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Other impacts of the 2013 earthquake

In 2013 over 389,000 tourists travelled to Bohol. Among the tourist attractions are a number of very old churches, dating back to the early years of the Spanish colonisation of the island.

Figure 6b: San Pedro Church before the earthquake

Figure 6c: San Pedro Church after the earthquake

Figure 6d: The destroyed Abatan Bridge that connects Maribojoc to Tagbilaran City, the capital of Bohol

Source: www.gmanetwork.com

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(c) Use **Figures 6a** to **6d** to suggest how the earthquake could have impacted on the economy of Bohol. [9]

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7. *(a)* Suggest why explosive volcanic eruptions are often the most hazardous. [8]

(b) Outline **one or more** short-term response(s) to the effects of volcanic hazards. [10]

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