

**A LEVEL GEOGRAPHY****UNIT 3****GLOBAL SYSTEMS AND
GLOBAL GOVERNANCE****SAMPLE ASSESSMENT MATERIALS****2 hours****ADDITIONAL MATERIALS**

In addition to this examination paper, you will need **one** 12 page answer book and a calculator.

INSTRUCTIONS TO CANDIDATES

Answer questions 1 **and** 2 and, **either** 3 **or** 4 in Section A.

Answer questions 5 **and** 6 and, **either** 7 **or** 8 in Section B.

Answer **one** question in Section C.

Use black ink or black ball-point pen.

Write your answers in the separate answer book provided.

Write your name, centre number and candidate number in the spaces at the top of the answer book.

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.

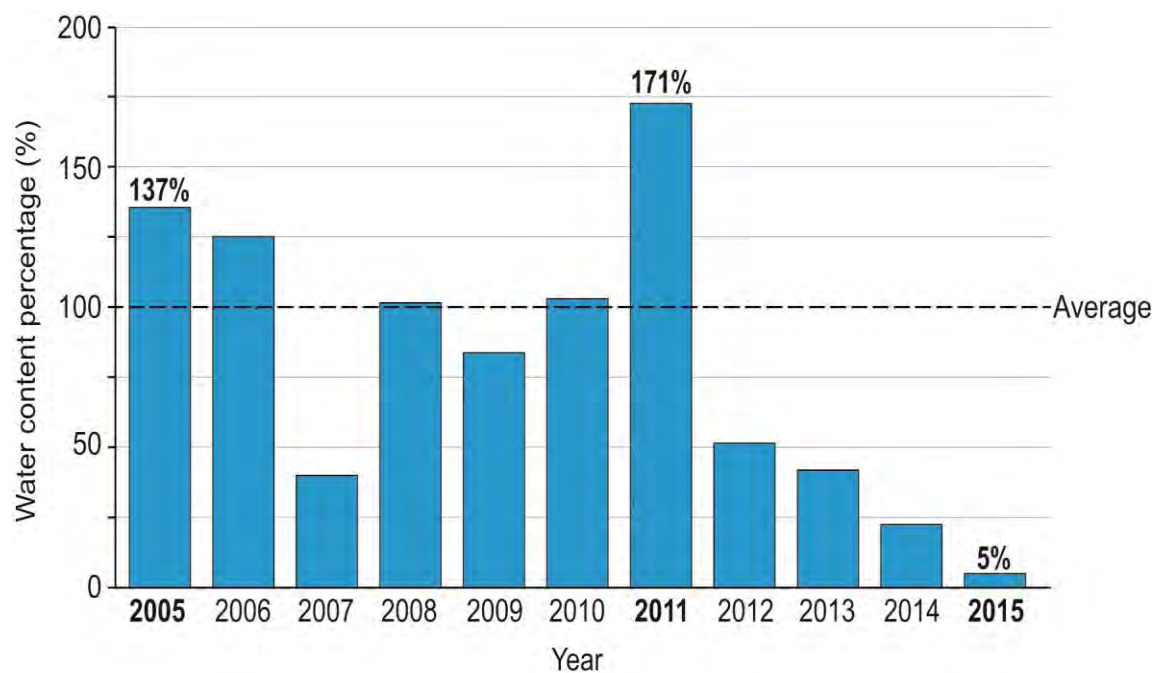
This paper requires that you make as full use as possible use of appropriate examples and references to data to support of your answers. Sketch maps and diagrams should be included where relevant.

Section A: Water and Carbon Cycles

Answer questions 1 and 2 and, **either 3 or 4.**

Where possible, make full use of examples and data in support of your answers.

Figure 1: Water content of the Sierra Nevada USA snowpack on April 1st from 2005 to 2015



100% = average water content on April 1st from 1950 to 2015

1. (a) Use **Figure 1** to describe changes in the water content of the Sierra Nevada snowpack between 2005 and 2015. [3]
- (b) Outline how convection can lead to the formation of clouds. [4]

2. (a) Describe **two** carbon pathways between land and atmosphere. [5]
- (b) To what extent does deforestation cause changes to the size of carbon stores in **one** selected biome. [5]

Either

- 3 Describe and evaluate how changes to stores within the drainage basin, such as snowpacks, have an impact on patterns of discharge. [18]

Or

- 4 Describe and evaluate the impacts of recent increases in the atmospheric carbon store on the oceans. [18]

Section B – Global Change and Challenges

Answer questions 5 and 6 and, **either 7 or 8.**

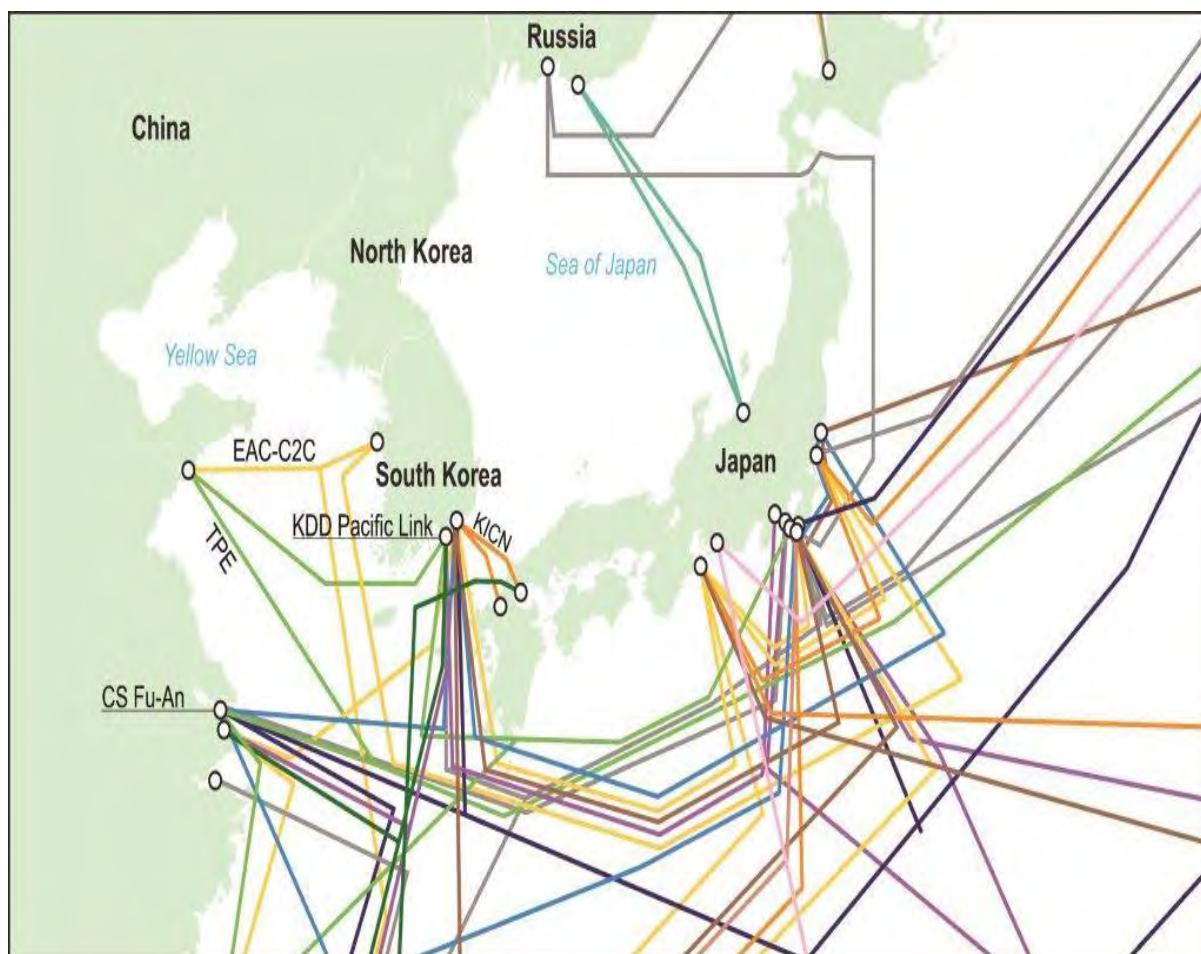
Where possible, make full use of examples and data in support of your answers.

Figure 2: The number and proportion of groups of migrants in selected regions in Wales in 2011

Regions	Country of origin					
	Portugal		Poland		Romania	
	Number of migrants	Percentage of total migrants	Number of migrants	Percentage of total migrants	Number of migrants	Percentage of total migrants
Neath Port Talbot	17	3.1%	287	7.8%	38	11.9%
Bridgend	30	5.4%	777	21.2%	52	16.3%
Rhondda Cynon Taf	100	18.1%	531	14.5%	37	11.6%
Merthyr Tydfil	293	53.1%	1,016	27.7%	16	5.0%
Caerphilly	55	10.0%	376	10.3%	77	24.1%
Blaenau Gwent	35	6.3%	330	9.0%	28	8.8%
Torfaen	10	1.8%	127	3.5%	9	2.8%
Monmouthshire	12	2.2%	218	6.0%	63	19.7%
Regions	552	100%	3,662	100%	320	100%
Wales	2316		18,023		1,495	

Source: 2011 Census data <http://www.walesruralobservatory.org.uk>

5. (a) Use **Figure 2** to describe the distribution of Portuguese in the selected regions of Wales. [3]
- (b) Examine how international migration can magnify economic differences between the UK and other countries [5]

Figure 3: Undersea data cable networks in the Asia-Pacific region, 2014

Source: adapted from: www.submarinecablemap

6. (a) Suggest how human factors may have affected the pattern of connectivity shown in **Figure 3** [5]
- (b) Explain how physical factors influence the global distribution of seafloor cable data networks [4]

Either

- 7 Evaluate why some places are popular destinations for international migration flows. [18]

Or

- 8 Assess the effectiveness of strategies designed to tackle the problems caused by ocean pollution. [18]

Section C – 21st Century Challenges (synoptic exercise)

Answer question 9 or question 10

You are advised to refer to figures 5, 6, 7 and 8 and make the fullest possible use of examples in support of your answers.

Study **Figures 5, 6, 7 and 8**

Either

9. Describe and assess the severity of the different risks that cities increasingly face. [26]

Or

10. To what extent can large megacities be successfully managed to reduce their vulnerability to different risks? [26]

Figure 5: Major cities and earthquake risk

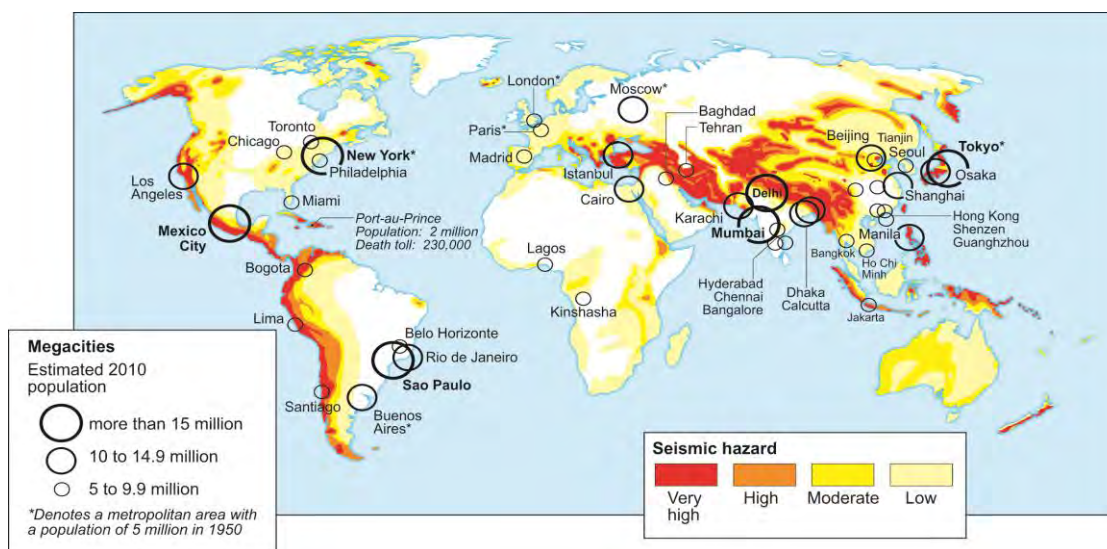
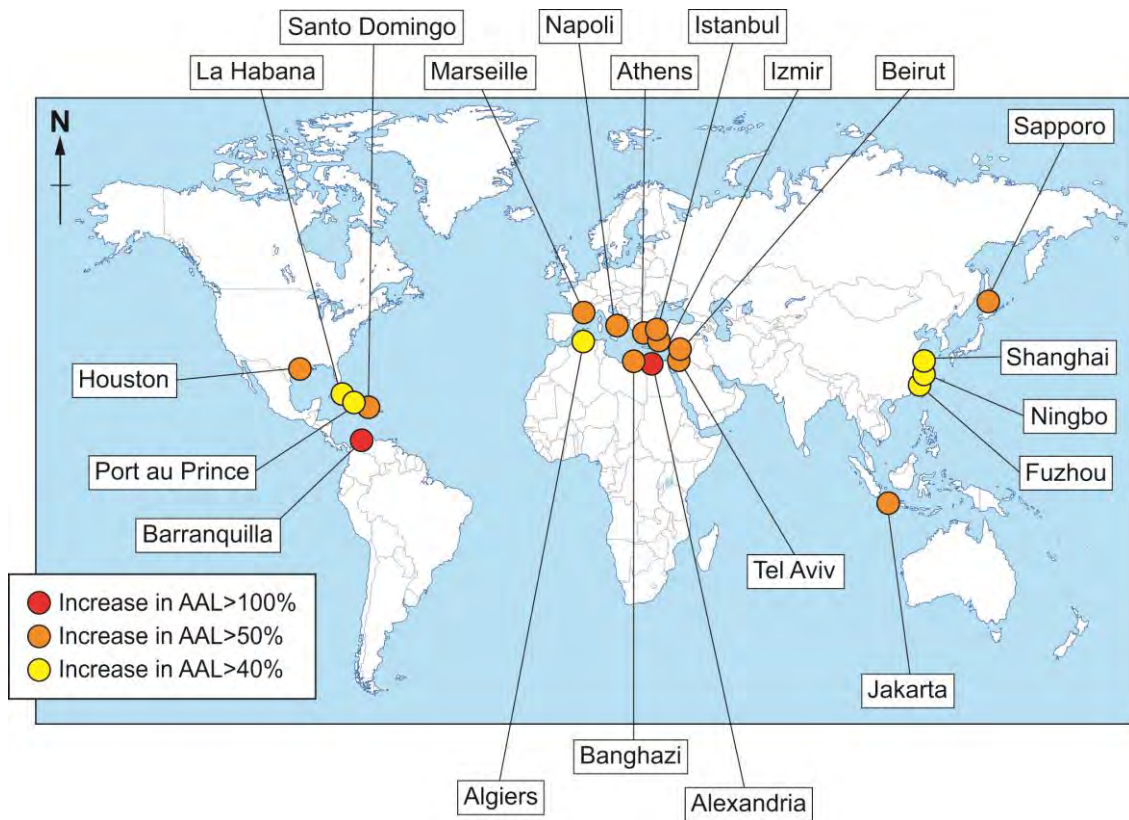


Figure 6: Tsunami warning zones

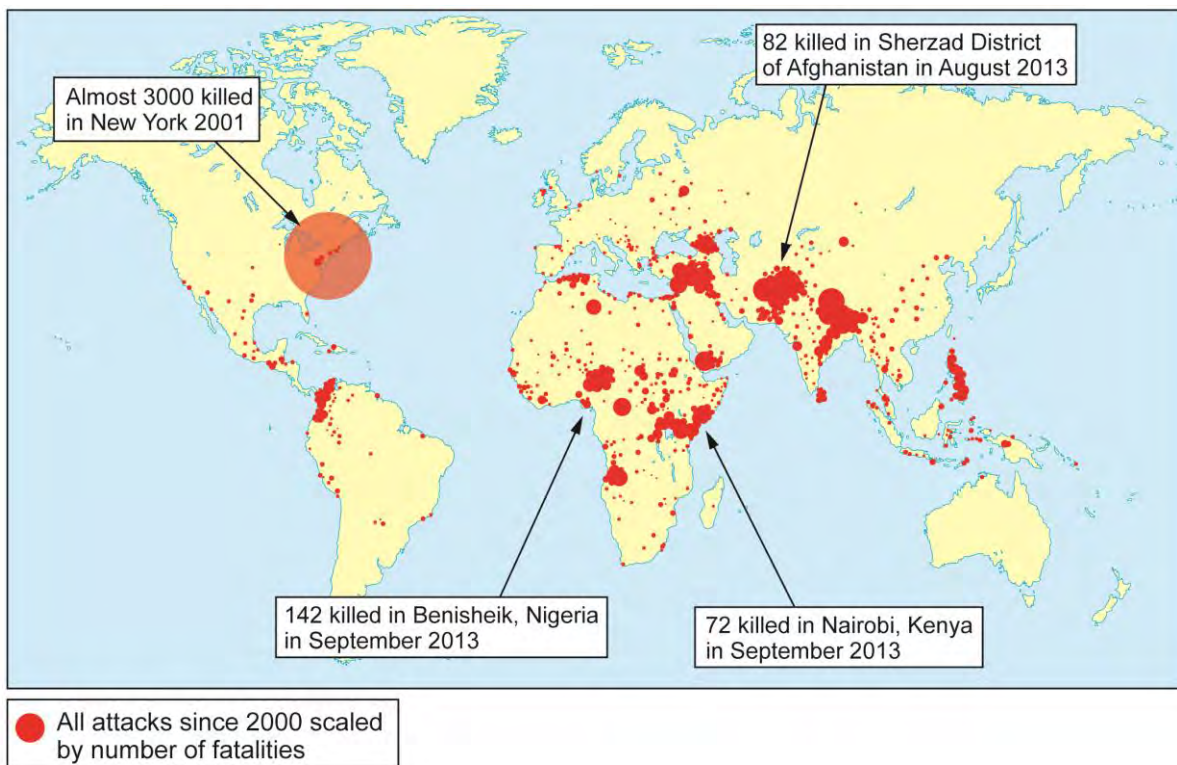


Figure 7: The 20 cities that face the biggest relative increase in average annual losses (AAL) in land area due to sea-level rise by 2050



Sources: adapted from: <http://www.washingtonpost.com>

Figure 8: Terrorist attacks worldwide 2000-2013



Source: adapted from: <http://c3.thejournal.ie>