Write your name here		
Surname	Other n	ames
Pearson Edexcel GCSE	Centre Number	Candidate Number
Geograp Unit 1: Dynamic P		
	F	oundation Tier
Tuesday 19 May 2015 – A		Paper Reference
Time: 1 hour 15 minute	S	5GB1F/01

#### Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- In Section A, answer **all** questions.
- In Section B, answer **either** question 5 **or** 6.
- In Section C, answer **either** question 7 **or** 8.
- Answer the questions in the spaces provided
  - there may be more space than you need.

#### **Information**

- The total mark for this paper is 78.
- The marks for **each** question are shown in brackets
  - use this as a guide as to how much time to spend on each question.
- Questions labelled with an asterisk (\*) are ones where the quality of your written communication will be assessed
  - you should take particular care on these questions with your spelling, punctuation and grammar, as well as the clarity of expression.
- The marks available for spelling, punctuation and grammar are clearly indicated.

# **Advice**

- Read each question carefully before you start to answer it.
- Check your answers if you have time at the end.

Turn over ▶

PEARSON

#### **SECTION A: INTRODUCTION TO THE DYNAMIC PLANET**

### Answer ALL questions in this section.

## **Topic 1: Restless Earth**

**1** Figure 1 shows a plate boundary.

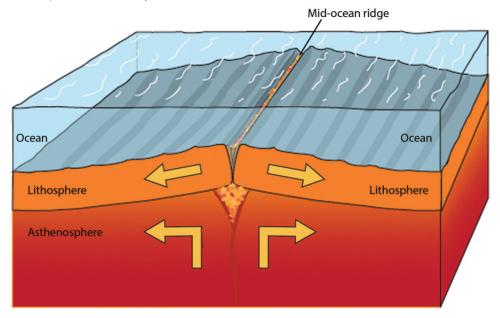


Figure 1

- (a) Study Figure 1.
  - (i) Identify the type of plate boundary shown in Figure 1.

(1)

- **A** conservative
- B constructive
- C destructive
- **D** continental
- (ii) Which **one** of the following best describes the lava erupted from volcanoes on plate boundaries such as the one shown?

- ☑ B It has a high gas content.
- **C** It is fast flowing.
- **D** It is viscous (thick).

(b) Give <b>two</b> likely <b>immediate</b> responses to an earthquake.	(2)
 (c) For an earthquake in a named location, describe the <b>primary</b> impacts on property and people.	(4)
Named location:	
(d) Describe the layered structure of the Earth's interior.	(4)
 (Total for Question 1 = 12 i	marks)

# **Topic 2: Changing Climate**

**2** Figure 2 shows the global pattern of carbon dioxide (CO<sub>2</sub>) emissions per person in 2010.

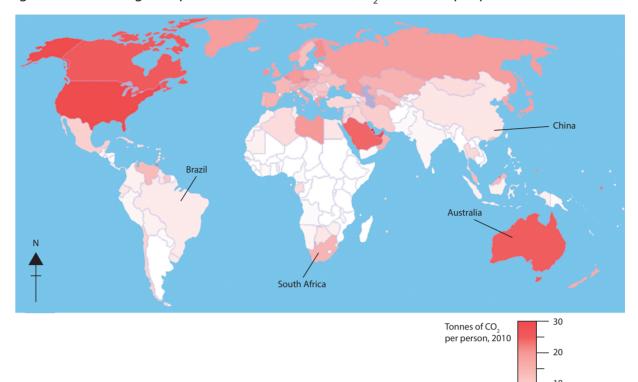


Figure 2

- (a) Study Figure 2.
  - (i) Which **one** of the following countries has the highest carbon dioxide emissions per person?

(1)

- 🖂 🗛 Australia
- **B** Brazil
- C China
- D South Africa
- (ii) Which **one** of the following best explains the high carbon emissions in the USA?

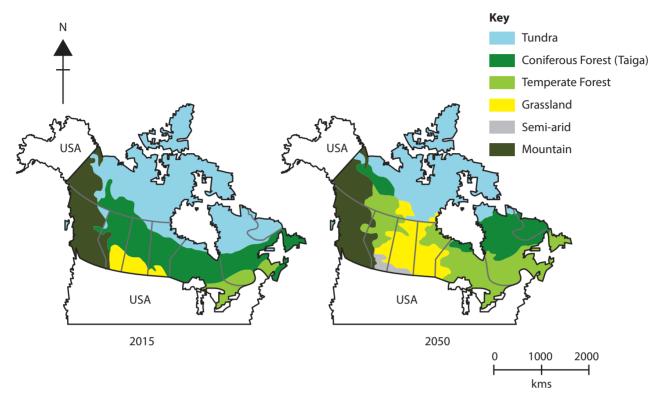
- A The use of renewable energy.
- B Industry is more energy efficient.
- C Many well insulated homes.
- **D** A large number of cars.

(b) Outline <b>one</b> way that volcanic eruptions can lead to climate change.	(2)
(c) Describe the pattern of temperature and rainfall in the UK.  Temperature	(4)
Rainfall	
(d) Describe the possible <b>environmental</b> impacts of future climate change in the UK.	(4)
(Total for Question 2 = 12 ma	rks)



### **Topic 3: Battle for the Biosphere**

**3** Figure 3 shows the predicted impact of a change in climate on the location of Canadian biomes.



(Source: Changes in Forest and Grasslands Boundaries, Atmospheric Environment Service. © Environment Canada, 1991)

Figure 3

- (a) Study Figure 3.
  - (i) Which **one** of the following best describes the location of tundra in 2015?

(1)

- **A** In the north.
- **B** On the west coast.
- C Along the border with the USA.
- **D** On the east coast.
- (ii) Which **one** of the following best explains the change in the area of tundra by 2050?

- **A** Deforestation.
- B Rising global temperatures.
- **D** Falling global temperatures.

(b) Outline <b>one</b> way in which the biosphere maintains soil health.	(2)
(c) Describe <b>one</b> local/national and <b>one</b> global approach used to manage the biosphere.  Local or national approach	(4)
Global approach	
(d) Explain how human activity is causing the destruction of tropical rainforests.	(4)
(Total for Question 3 = 12 ma	rks)



# **Topic 4: Water World**

**4** Figure 4 shows the causes of river pollution in the USA.

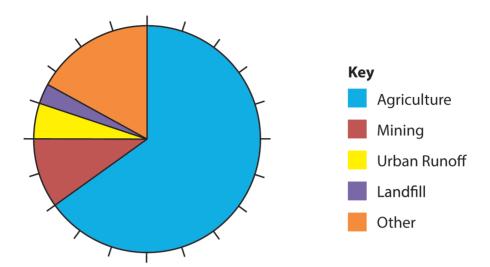


Figure 4

- (a) Study Figure 4.
  - (i) What percentage does mining contribute to river pollution in the USA?

(1)

- B 10%
- **D** 65%
- (ii) Which **one** of the following best explains the size of agriculture's contribution to river pollution in the USA?

- A The frequent use of irrigation.
- **B** Agriculture has become more mechanised.
- **D** The average field size has increased.

	(b) Outline <b>one</b> possible impact on people of a limited water supply.	(2)
1 .	(c) Describe <b>two</b> human activities that disrupt water supplies.	(4)
 2 .		
	(d) Small-scale water management schemes often use intermediate technology.  Using a named example, describe <b>two</b> benefits of using intermediate technology.	(4)
1.	Named example:	
2 .		
	(Total for Question 4 = 12 ma	rks)
	TOTAL FOR SECTION A = 48 MAI	RKS



### **SECTION B: SMALL-SCALE DYNAMIC PLANET**

Answer ONE question in this section.

**Topic 5: Coastal Change and Conflict** 

If you answer Question 5 put a cross in the box  $\ oxdots$  .

Spelling, punctuation and grammar will be assessed in 5\*(d).

**5** Figure 5 shows a stretch of coastline.

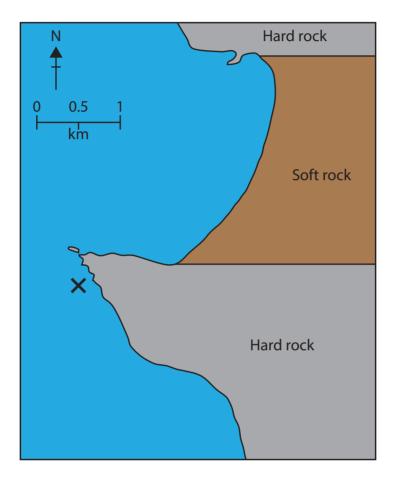


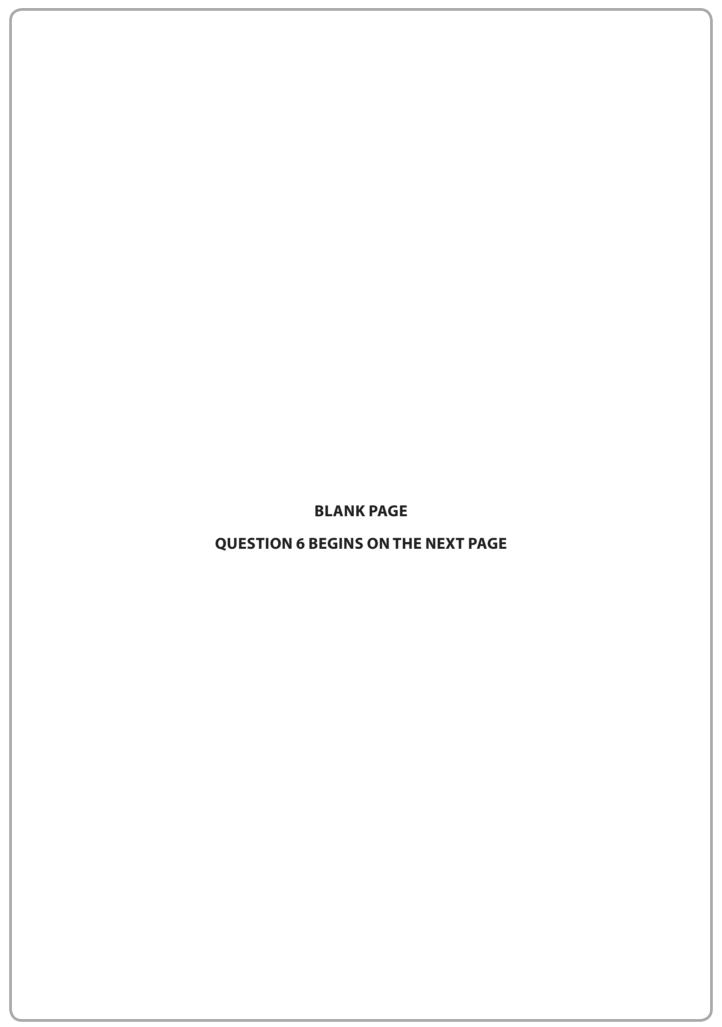
Figure 5

- (a) Study Figure 5.
  - (i) Which **one** of the following best describes this stretch of coastline?

- A destructive
- **B** concordant
- **C** constructive
- **D** discordant

	(ii) Wl	nich <b>on</b>	<b>e</b> of the followin	ig landforms is	s most likely t	o be found at >	(1)
	×	<b>A</b> st	ack				
	$\times$	<b>B</b> sp	oit				
	$\times$	C be	each				
	$\times$	<b>D</b> du	une				
	(b) Outlin	ne <b>one</b> \	way in which mo	ore storms cou	ıld affect mar	ine erosion.	 (2)
1			efits of using har				(2)
2							

		stal retreat on local comn	(6)
Named coastline:			
	(Total for spelling, pu	nctuation and gramma	r = 3 marks)
	(10tal 101 5pc3, pa	(Total for Question 5	

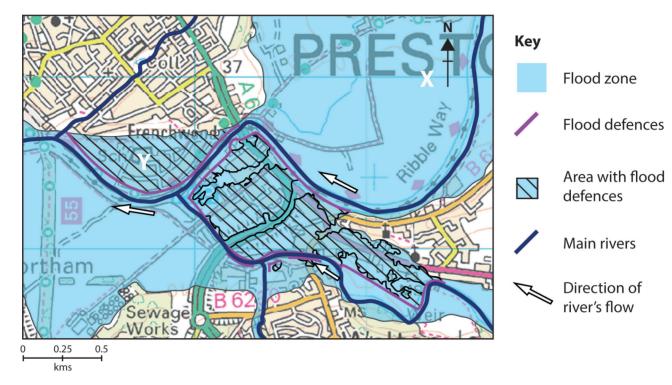


### **Topic 6: River Processes and Pressures**

If you answer Question 6 put a cross in the box  $\square$ .

### Spelling, punctuation and grammar will be assessed in 6\*(d).

**6** Figure 6 shows an Environment Agency flood map for Preston.



(Source: © Environment Agency 2014. © Ordnance Survey Crown copyright)

### Figure 6

- (a) Study Figure 6.
  - (i) Which **one** of the following best explains why X is more likely to flood than Y?

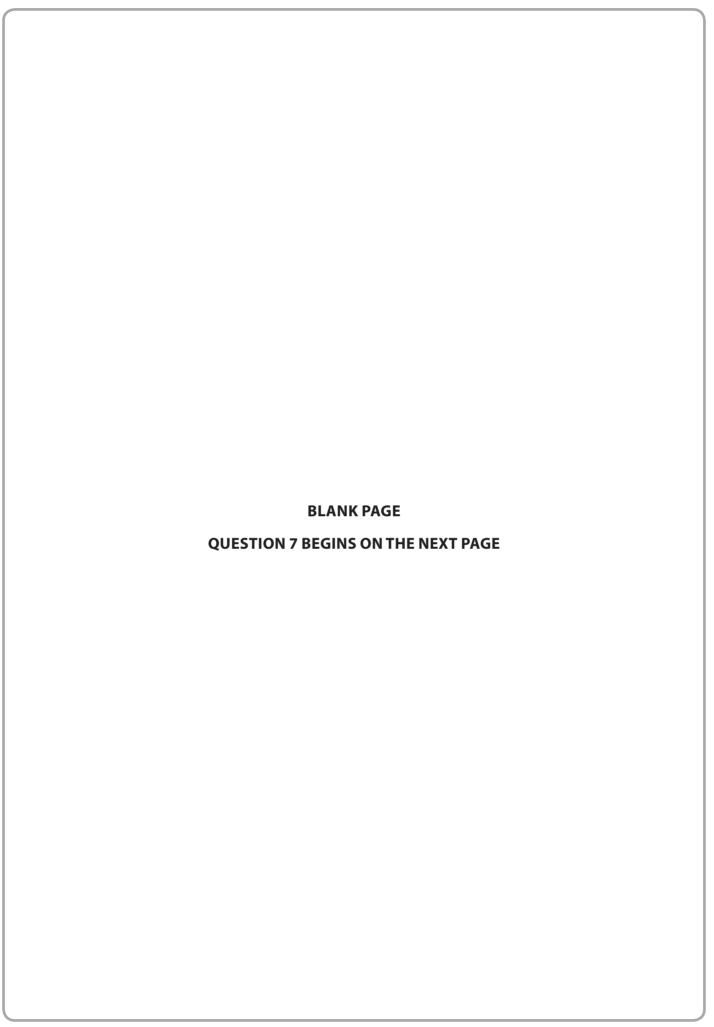
(1)

- A There are no flood defences at X.
- **B** Several rivers join at X.
- ☐ C The floodplain has been built on at X.
- **D** It rains more heavily at Y.
- (ii) Which **one** of the following best explains why an area is protected from flooding?

- A Only a few people live there.
- **B** Few transport links.
- **C** High land value.
- **D** Low land value.

(b) Outline <b>one</b> slope process.	(2)
(c) Give <b>two</b> changes that occur along a river's course.	(2)
2	

	(6)
Named river:	
	(Total for spelling, punctuation and grammar = 3 marks) (Total for Question 6 = 15 marks)
	TOTAL FOR SECTION B = 15 MARKS



#### **SECTION C: LARGE-SCALE DYNAMIC PLANET**

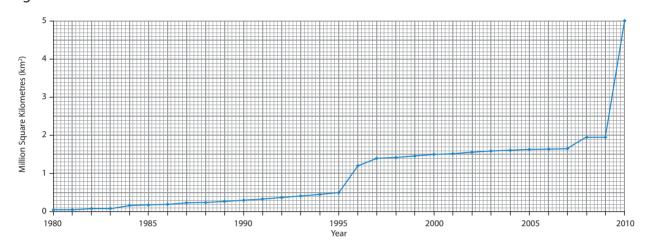
# Answer ONE question in this section.

### **Topic 7: Oceans on the Edge**

# If you answer Question 7 put a cross in the box $\ oxdiv$ .

## Spelling, punctuation and grammar will be assessed in 7\*(d).

**7** Figure 7 shows the total area of marine reserves in UK waters from 1980 to 2010.



(Source of data: JNCC)

Figure 7

- (a) Study Figure 7.
  - (i) Which **one** of the following statements is correct?

The total area of UK marine reserves:

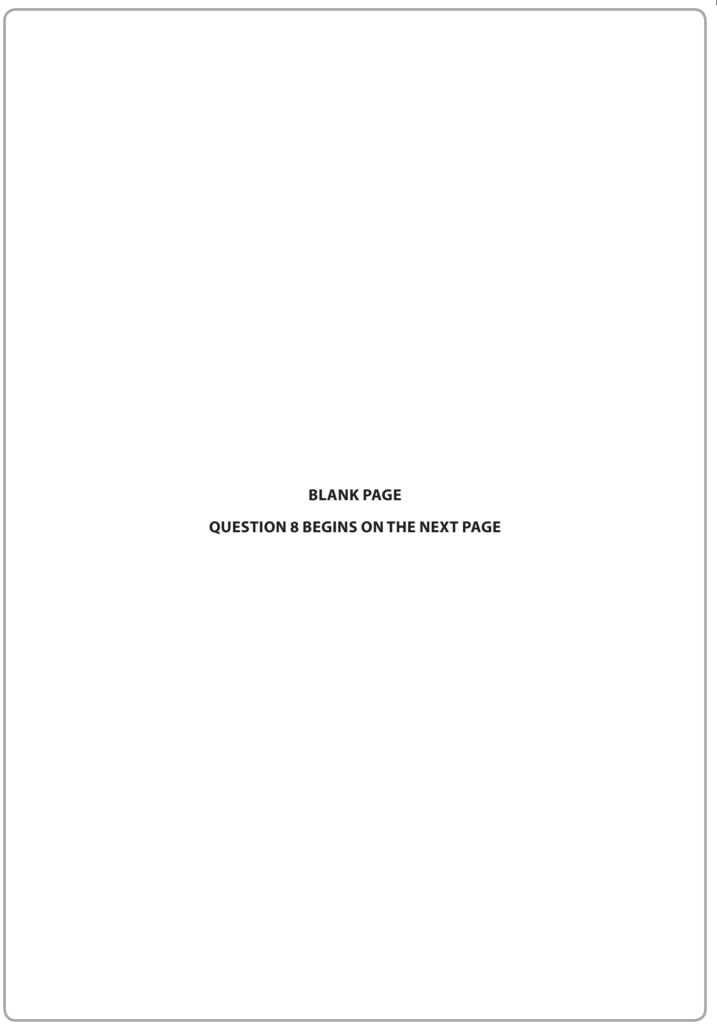
(1)

- A declined between 1980 and 2010.
- **B** grew fastest between 2009 and 2010.
- **C** stayed the same between 1985 and 1990.
- D grew slowly between 1995 and 1996.
- (ii) What was the total area of marine reserves in 2010?

- **B** 3 million km<sup>2</sup>
- C 2.8 million km<sup>2</sup>
- **D** 5 million km<sup>2</sup>

(b) Give <b>two</b> threats to marine ecosystems.	(2)
(c) Outline <b>one</b> reason for the decline in <b>either</b> coral reefs <b>or</b> mangrove swamps over the past 50 years.	(2)

*(d) Using examples, exp	lain how marine ecosystems	s can be managed sustaiı	nably. (6)
	(Total for spelling, pu	ınctuation and gramma (Total for Question 7	
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# **Topic 8: Extreme Environments**

# If you answer Question 8 put a cross in the box $\ oxdots$ .

# Spelling, punctuation and grammar will be assessed in 8\*(d).

**8** Figure 8 shows the mean monthly maximum temperature in Western Australia.

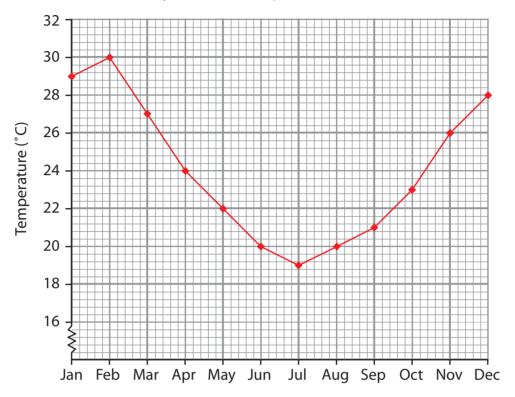


Figure 8

- (a) Study Figure 8.
  - (i) Which **one** of the following statements is correct?

(1)

- **A** July is the hottest month.
- **B** The temperature stays the same between May and September.
- ☐ C The temperature increases from July to February.
- **D** The coldest month is December.
- (ii) What is the mean maximum temperature in September?

- B 19°C

	Give <b>two</b> local actions that can make communities in extreme environments more sustainable.	e (2)
		(2)
(c)	Outline how out-migration is threatening communities in extreme environments.	
		(2)

f(d) Explain how plants (flora) and a	animals (fauna) have adapted to extreme climates. (6)
(Tota	al for spelling, punctuation and grammar = 3 marks) (Total for Question 8 = 15 marks)
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(Tota	(Total for Question 8 = 15 marks)  TOTAL FOR SECTION C = 15 MARKS
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