Write your name here Surname	Other	names
Pearson Edexcel GCSE	Centre Number	Candidate Number
Geograp	hv B	
Unit 1: Dynamic P		
	lanet	Foundation Tier
	lanet Afternoon	Foundation Tier Paper Reference 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** guestion 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.

P 4 8 6 9 7 A 0 1 2 8

Turn over ▶



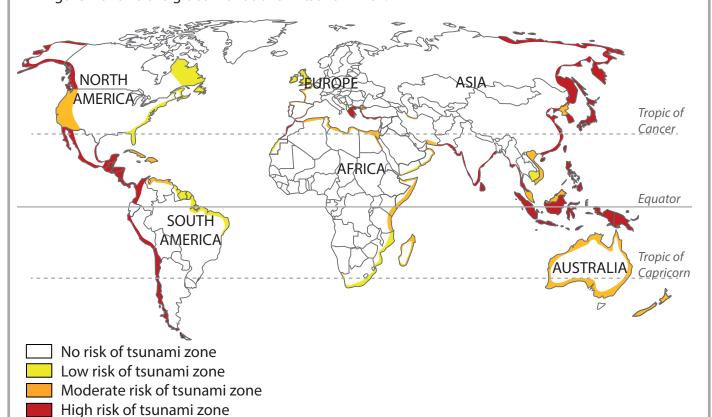
#### **SECTION A - INTRODUCTION TO THE DYNAMIC PLANET**

Answer ALL questions in this section.

#### **Topic 1: Restless Earth**

Some questions must be answered with a cross in a box  $\boxtimes$ . If you change your mind about an answer, put a line through the box  $\boxtimes$  and then mark your new answer with a cross  $\boxtimes$ .

1 Figure 1 shows the global variations in tsunami risk.



(Source: http://www.mapsofworld.com/world-maps/tsunami-zones.html)

Figure 1

- (a) Study Figure 1.
  - (i) Which **one** of the following coastlines has the lowest risk of tsunamis?

- A Western North America
- **B** Western South America
- C Western Africa
- **D** Eastern Asia



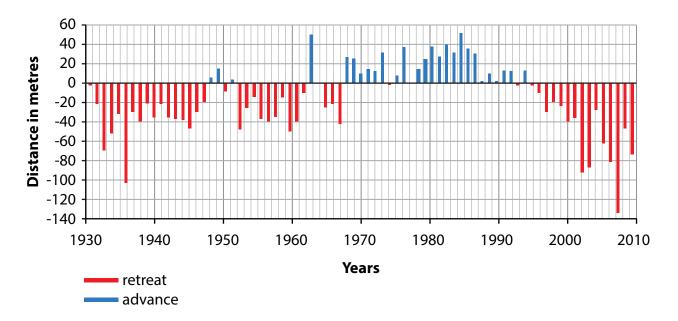
(ii) Which <b>one</b> of the following is the main cause of tsunamis?	(1)
■ A volcano	
■ B tropical storm	
■ D earthquake	
(b) Outline <b>one</b> difference between primary and secondary impacts of	
tectonic hazards.	(2)
(c) For a named tectonic hazard event, describe the immediate responses.	(4)
Named tectonic hazard event	



(d) Explain why earthquakes occur on conservative plate boundaries.	
You may use a diagram to help your answer.	(4)
	(4)
(Total for Question 1 = 12 ma	arks)
(Total for Question 1 – 12 life	ai NJ

# **Topic 2: Changing Climate**

**2** Figure 2 shows the advance and retreat of Sólheimajökull, an Icelandic glacier, between 1930 and 2010.



(Source: www.geocaching.com)

Figure 2

- (a) Study Figure 2.
  - (i) In which **one** of the following decades did the glacier retreat most?

(1)

- B 1950s

- (ii) Which **one** of the following statements best describes the changes in the glacier in the 1990s?

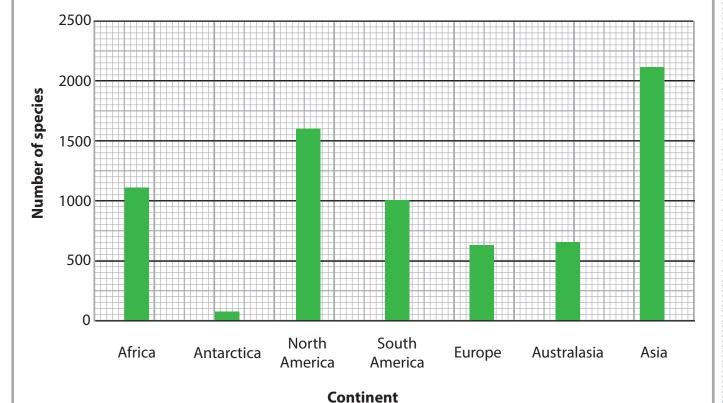
- A It retreated throughout the decade.
- **B** It retreated in the first few years and then advanced.
- C It advanced in the first few years and then retreated.
- **D** It advanced throughout the decade.

	(b) Other than glacial advance and retreat, describe <b>two</b> pieces of evidence that show that climate change has happened in the past.	(4)
1		
Z		
	(c) What is meant by the term <b>greenhouse effect</b> ?	(2)

	rescribe the possible impacts of future climate change on a named eveloping country.	(4)
N	amed developing country	
	(Total for Question 2 = 12 mar	ks)

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

Figure 3 shows the numbers of endangered species, which are likely to become extinct, for the seven continents.



Continent

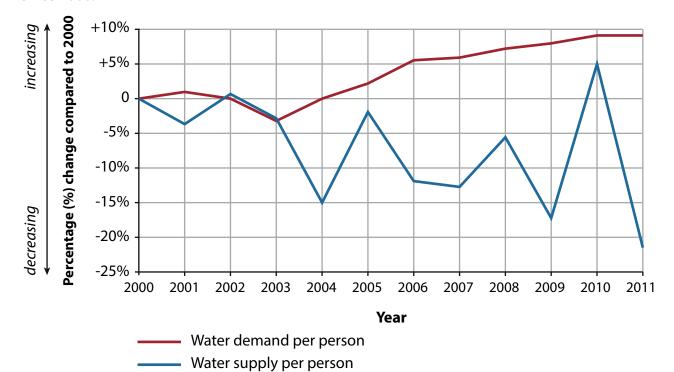
Figure 3

(a) Study Fi	gure	e 3.	
		<b>ne</b> of the following continents has the highest number of ered species?	(1)
$\boxtimes$	A	North America	
$\boxtimes$	В	Africa	
×	C	Asia	
$\boxtimes$	D	Europe	
		the approximate total number of endangered species across nents?	(1)
$\boxtimes$	A	10 000	
$\boxtimes$	В	5 000	
	C	7 250	
$\boxtimes$	D	2 500	
		<b>one</b> reason why tropical rainforests might have many ered species.	(2)

to conserve the biosphere.	(4)
Named location	
Explain why altitude affects biome location.	
Explain why altitude affects biome location.	(4)
Explain why altitude affects biome location.	(4)
Explain why altitude affects biome location.	(4)
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## **Topic 4: Water World**

**4** Figure 4 shows the changing supply and demand of water per person in China since 2000.



(Source: from http://chinawaterrisk.org/wp-content/uploads/2015/04/Towards-A-Water-Energy-Secure-China-CWR0415.pdf)

Figure 4

- (a) Study Figure 4.
  - (i) Which **one** of the following best describes the changes in water supply per person?
    - (1)
    - **A** It increased and decreased but was lowest in 2011.
    - **B** It increased in every year except 2009.
    - C It increased in more years than it decreased.
    - **D** It increased in all years.
  - (ii) Which **one** of the following is the most likely impact of water shortages in China?

- A Higher risk of crop failure.
- B Decrease in waterborne diseases.
- C Cheaper prices for clean water.
- D Less time spent collecting clean water.



(b) For a named large-scale water management scheme, describe one cost and one benefit.  (4)  Large-scale water management scheme  Cost  Benefit	(iii) Suggest <b>one</b> reason why demand for water has risen in China.	(2)
one benefit.  (4)  Large-scale water management scheme  Cost		
one benefit.  (4)  Large-scale water management scheme  Cost		
one benefit.  (4)  Large-scale water management scheme  Cost	(b) For a named large scale water management scheme describe and	
Large-scale water management scheme		
Cost		(4)
	Large-scale water management scheme	
Benefit	Cost	
Benefit		
	Benefit	

(c) Outline <b>two</b> threats to water qualit	y.
	(4)
1	
2	
<b>4</b>	
	(Total for Question 4 = 12 marks)
	TOTAL FOR CECTION A 40 MARKS

**TOTAL FOR SECTION A = 48 MARKS** 

#### **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  $\ \square$  .

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

**5** Figure 5 shows a cliff collapse in the west of England.



Figure 5

- (a) Study Figure 5.
  - (i) Which **one** of the following is the most likely process of mass movement taking place?
- (1)

- **B** weathering
- **C** attrition
- **D** slumping

14

(ii) Whic	h <b>or</b>	<b>ne</b> of the following is the most likely cause of this cliff collapse?	(1)
$\times$	A	A period of light rain and stormy seas.	
$\boxtimes$	В	A period of heavy rain and stormy seas.	
$\boxtimes$	C	A period of light rain and calm seas.	
$\times$	D	A period of heavy rain and calm seas.	
(b) Outline <b>c</b>	one	method of soft engineering used in the management of coasts.	(2)
(c) State <b>two</b>	<b>o</b> di1	fferences between constructive and destructive waves.	(2)
1			
2			

*(d) Explain the formation of a stack.	
You may use a diagram to help your answer.	(6)
	(0)

(Total for spelling, punctuation and grammar = 3 marks)
(Total for Question 5 = 15 marks)

#### **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 river erosion in North Carolina, USA.



(Source: http://www.bae.ncsu.edu/programs/extension/wqg/sri/southfork.htm)

#### Figure 6

- (a) Study Figure 6.
  - (i) Which **one** of the following is the most likely process causing this river erosion?

(1)

- A hydraulic action
- **B** weathering
- C attrition
- **D** solution
- (ii) Which **one** of the following is the most likely cause of this river bank collapse?

- A A period of light rain and high discharge.
- **B** A period of heavy rain and high discharge.
- C A period of light rain and low discharge.
- D A period of heavy rain and low discharge.

		Т
(b) Outling are reathed of soft anning aring used in th	a a managamant of vivays	
(b) Outline <b>one</b> method of soft engineering used in the	e management of rivers.	
	(2)	
( ) ( ) ( ) ( )		
(c) State <b>two</b> differences between the lower and upper	er courses of rivers.	
(c) State <b>two</b> differences between the lower and upper	er courses of rivers. (2)	
(c) State <b>two</b> differences between the lower and uppe	(-)	
(c) State <b>two</b> differences between the lower and upper	(-)	
(c) State <b>two</b> differences between the lower and upper	(-)	
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(c) State <b>two</b> differences between the lower and upper	(-)	
(c) State <b>two</b> differences between the lower and upper	(-)	
(c) State <b>two</b> differences between the lower and upper	(-)	

*(d) Explain the formation of a floodplain.  You may use a diagram to help your answer.	
	(6)

(Т	otal 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  $\square$ .

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

**7** Figure 7 shows the top five items of waste found on Californian beaches on 'Clean-up day', 2015.



(Source: from switchboard.nrdc.org)

Figure 7

- (a) Study Figure 7.
  - (i) Which **one** of the following materials made up most of this waste?

- A plastic
- **B** glass
- C metal
- D paper

(ii) Whic in thi		<b>ne</b> of the following is most likely to contribute to an increase aste?	(1)
$\boxtimes$	A	overfishing	
$\boxtimes$	В	tourism	
×	c	intensive agriculture	
×	D	industrial pollution	
(b) Outline <b>o</b> <b>or</b> coral r		way coastal development is a threat to <b>either</b> mangrove swamps s.	(2)
(c) What is n	neai	nt by the term <b>nutrient cycle</b> ?	(2)



*(d) Using examples, explain h	how global actions can help maintain ocean health.	(6)
	(Total for spelling, punctuation and grammar = 3 (Total for Question 7 = 15)	

# BLANK PAGE QUESTION 8 BEGINS ON THE NEXT PAGE.

#### **Topic 8: Extreme Environments**

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

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

**8** Figure 8 shows how Fennec foxes have adapted to their environment.



A Fennec fox

- Fennec foxes live in holes underground where they hide during the day and raise their young.
- They hunt at night.
- Excellent hearing helps them find their prey and big ears help keep them cool.

(Source: used under Creative Commons)

## Figure 8

- (a) Study Figure 8.
  - (i) Which **one** of the following is an adaptation made by Fennec foxes to high temperatures?

(1)

- A long whiskers
- B long tail
- C big ears
- **D** dark eyes
- (ii) Which **one** of the following may threaten this species?

- A deforestation
- **B** climate change
- C sea level rise
- **D** marine pollution



(b) Outline <b>one</b> way in which people have adapted to extreme environments.	(2)
(c) What is meant by the term <b>desertification</b> ?	(2)

*(d) Using examples, explain the role of global actions in protecting extreme environments from climate change.	(4)
	(6)
(Total for spelling, punctuation and grammar = (Total for Question 8 =	

TOTAL FOR SECTION C = 15 MARKS
TOTAL FOR PAPER = 78 MARKS

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