Surname	Other n	ames
Pearson Edexcel GCSE	Centre Number	Candidate Number
Geograp Unit 2: The Natura		
	Liiviioiiiiiciic	
		oundation Tier
Wednesday 8 June 2016 Time: 1 hour 15 minute	<b>F</b> – Afternoon	Paper Reference 5GA2F/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 4 **or** 5.
- Answer the questions in the spaces provided
  - there may be more space than you need.

#### Information

- The total mark for this paper is 69.
- 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 ▶

#### **SECTION A - THE PHYSICAL WORLD**

#### Answer ALL questions in this Section.

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  $\boxtimes$ .

**Topic 1: Coastal Landscapes** 

**1** Study Figure 1a.

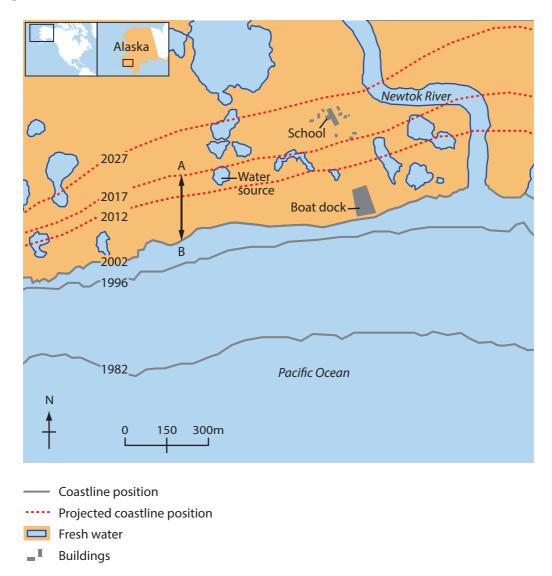


Figure 1a

The past and projected coastline at Newtok, Alaska, 2002

(a) (i) Complete the following sentences that describe the changes in the position of the coastline and the impacts of this at Newtok, Alaska.

Use some of the words, dates and numbers in the box below.

(4)

2012	more	45	school	2002
less	63	water source	1996	ocean

Figure 1a shows changes in the position of the coastline over

a ......year period.

By ...... the boat dock had been destroyed by

the sea.

By 2017 Newtok will lose its .......

It is likely that these coastal changes may cause ......

people to move away from this area.

(ii) What is the distance between points A and B?

(1)

- A Less than 150 metres.
- B 150–200 metres.
- **D** 250–300 metres.
- (iii) Which **one** of the following is a possible reason for the changes to this coastline?

(1)

- A A fall in sea level.
- **B** Additional sea defences.
- C A rise in sea level.
- D Cliff regrading.



(b) Whic a coa		<b>e</b> of the following best describes the impact of a <b>long</b> fetch on e?	(1)
$\boxtimes$	A	There will be less erosion.	( - )
×	В	There will be more erosion.	
×	C	There will be no erosion.	
×	D	There will be more weathering.	
(c) Outli		ne following coastal processes:	(4)
Mass	mov	/ement	

(d) Using located examples, describe how the effects of coastal flooding are reduced through forecasting.	(4)
(Total for Question 1 = 15 ma	arks)
(Total for Question 1 – 13 ille	ai K3)

## **Topic 2: River Landscapes**

- **2** (a) (i) Which **one** of the following terms describes the place where two rivers join?
- (1)

- A mouth
- **B** confluence
- **C** source
- **D** tributary
- (ii) Which **one** of the following is a definition of the term **watershed**?

(1)

- A The main channel in a drainage basin.
- **B** A shape of a drainage basin.
- ☐ C The boundary of the drainage basin.
- **D** The size of the drainage basin.
- (b) Study Figure 2a.



Figure 2a

A photograph of river landforms in Iceland

(i) Whi	ich <b>o</b> ı	<b>ne</b> of the following landfo	orms is shown	in Figure 2a?		(1)
×	Α	gorge				
×	В	meander				
×	C	floodplain				
$\times$	D	interlocking spurs				
land	dform	e the following sentences as shown in Figure 2a. e of the words in the box		the formation	of the	(4
wa	ter	horizontal	rock	gradual	precipitation	
ste	ер	hydraulic action	solution	vertical	attrition	
An i	impo	rtant process in the forma	ation of water	falls		
is			erosion.			
The	mair	n type of erosion in the pl	unge pool is			
This	eros	ion is caused by the force	e of the			
hitt	ing th	ne rock.				
As t	he w	aterfall cuts back it leaves	5			

a ......sided valley.

(4)

# (c) Study Figure 2b.

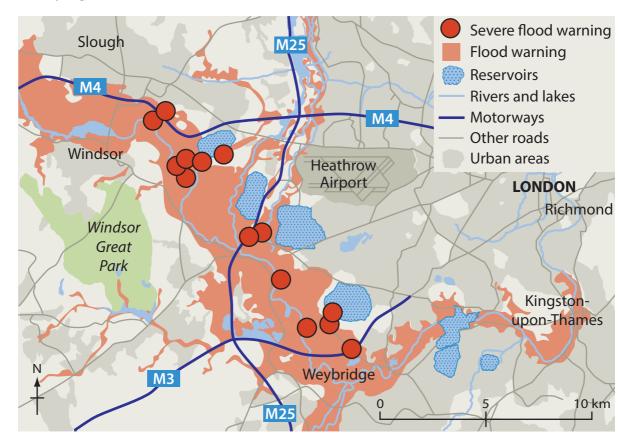


Figure 2b

# Flood warnings around south west London, February 2014

Using Figure 2b, suggest **two** impacts of the possible flooding on people.

1
2

(d) Explain the advantages of using hard engineering to manage rivers in the Ul	<. (4)
(Total for Question 2 = '	15 marks)

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QUESTION 3 BEGINS ON THE NEXT PAGE.

#### **Topic 3: Tectonic Landscapes**

**3** (a) (i) Which **one** of the following is the name of the descriptive scale used to measure earthquake impact or damage?

(1)

- **A** Mercalli
- B Seismic
- **D** Richter
- (ii) Which **one** of the following is the **best** definition of an earthquake?

(1)

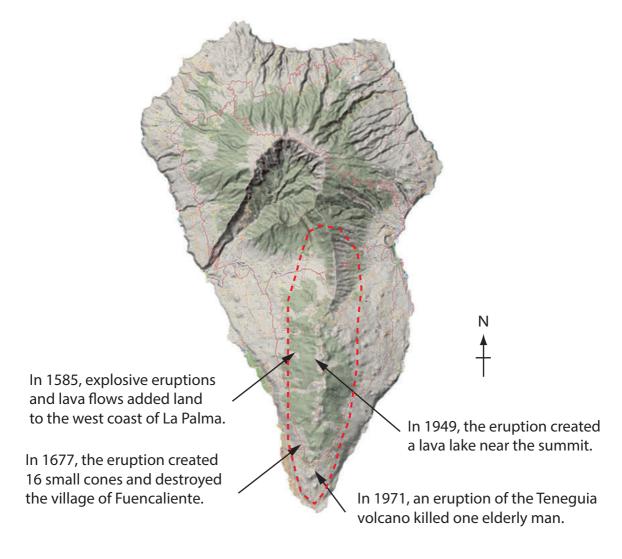
- ☑ A Lava erupting onto the surface.
  - **B** A build up of pressure leading to the crust breaking.
  - ☐ C Shaking and movements of the surface.
  - **D** Pressure build up in the crust.
- (iii) Where are high magnitude earthquakes most likely to occur?

(1)

- A On divergent plate boundaries.
- **B** On hotspots.
- C On the sea floor.
- **D** On convergent plate boundaries.



## (b) Study Figure 3a.



---- Cumbre Vieja volcanic zone



Figure 3a

Map showing some of the historic eruptions on the island of La Palma, Canary Islands

Complete the following sentences to describe the volcanic activity on La Palma.

Use some of the words in the box below.

1677	ocean	Cumbre Vie	eja Duraznero	o 1971
lava	Teneguia	1585	Fuencaliente	fresh water
e date of the	e earliest eruption	n was		
ive volcano	es are found in tl	he		zone.
e most rece	nt eruption was t	he		volcano and
sed the dea	ath of one man.			
ng located (		e the economi	lak c reasons why peopl	
ng located (	examples, describ	e the economi		
ng located (	examples, describ	e the economi		
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ng located (	examples, describ	e the economi		
ng located (	examples, describ	e the economi		
ng located (	examples, describ	e the economi		



(d) Use an annotated diagram(s) to explain the formation of a hotspot (volcanic island).

(4)

(Total for Question 3 = 15 marks)

**TOTAL FOR SECTION A = 45 MARKS** 



# BLANK PAGE SECTION B BEGINS ON THE NEXT PAGE

#### **SECTION B - ENVIRONMENTAL ISSUES**

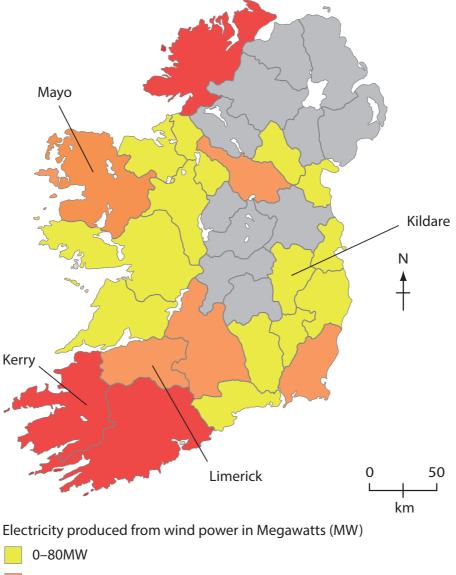
#### **Answer EITHER Question 4 OR Question 5.**

#### **Topic 4: A Wasteful World**

Spelling, punctuation and grammar will be assessed in 4\*(d).

If you answer Question 4 put a cross in the box 🔲 .

Study Figure 4a.



81-160MW

160+MW

no data

(Source: © Copyright Guardian News & Media Ltd 2012)

Figure 4a

Electricity (MW) produced from wind energy in selected Irish counties, 2012



X

(~)	/:\	Llaina	Figure	1-	C0 100 10	1-+-	+h~	+2612	اما	0141
(d)	(1)	USIIIQ	riaure	40.	COITID	iete	une	lable	bei	OW.

County	Energy produced from wind (megawatts – MW)
Kildare	0–80 MW
Mayo	81–160 MW
Kerry	
Limerick	

(ii)	Which one	of the	following	is used to	generate wind energy?	
٠٠٠/					30	

(1) solar panels biomass rotating turbines

(iii)	Which <b>one</b> of the following best describes the pattern of electricity	produced
	from wind power shown on Figure 4a?	

(1)

X	A	The highest values are in the east.	
---	---	-------------------------------------	--

anemometer

- Most of the lowest values are in the west.
- The lowest values are in the north east.
- **D** Most of the highest values are in the south west. X

(iv)	Suggest one reason why	there is a	variation ir	n electricity	generated	from \	wind
	power in Ireland.						

(2)

(2)

# (b) Study Figure 4b.

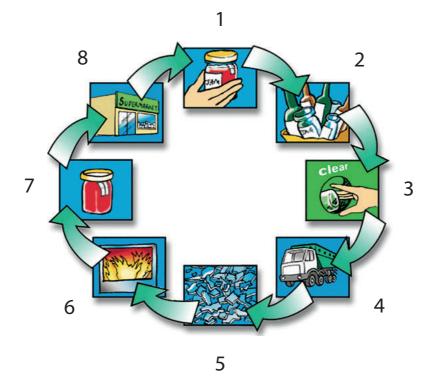


Figure 4b

# The process of glass recycling on a local scale

- (i) Identify Stages 3 and 8 using the list below.
  - **A** Sort glass at home.
  - **B** Filled jars are taken to the shops.
  - **C** New jars are filled.
  - **D** Glass collected and transported to a recycling centre.
  - **E** Put glass in a recycling bin.
  - **F** Glass is crushed for melting.
  - **G** Glass is melted into new shapes
  - **H** Products from glass jars used at home

Stage 3	
Stage 8	

(2)

(ii) Outline <b>one</b> advantage of recycling.	(2)
(c) Describe how a named High Income Country (HIC) disposes of its solid waste.  Named HIC	(4)



* (d) Explain why the carbon footprint varies for countries at different levels of development.				
or development.	(6)			
	(Total for spelling, punctuation and grammar = 4 marks)			
	(Total for Question 4 = 24 marks)			

# BLANK PAGE QUESTION 5 BEGINS ON THE NEXT PAGE.

# **Topic 5: A Watery World**

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

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

# **5** Study Figure 5a.

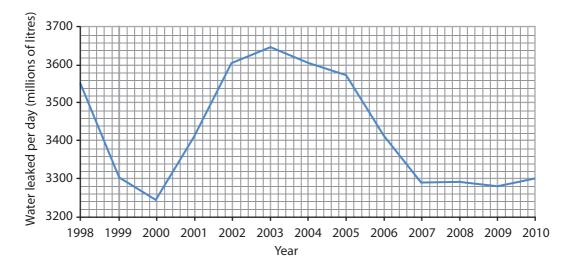


Figure 5a
Water leaked per day (millions of litres) in the UK, 1998–2010

(a) (i) Complete the table below.

(2)

Year	Water leaked per day (millions of litres)
1998	3550
2003	
2008	
2010	3400

		<b>one</b> of the following best describes changes in the amount of water shown in Figure 5a?	(1)
$\boxtimes$	Α	The amount of water leaked increases between 1998 and 2010.	
×	В	The amount of water leaked peaks at 3750.	
×	C	From 2001 to 2003 the amount of water leaked decreases.	
×	D	The amount of water leaked decreased between 2003 and 2009.	
		<b>one</b> of the following best describes a reason for water leakages, such as hown on Figure 5a?	(1)
×	A	Broken main water pipes.	
X	В	People taking too much water from rivers.	
×	C	Heavy rainfall.	
×	D	Broken radiators.	
(b) Sugges	st <b>or</b>	ne reason why a lack of rainfall can cause water supply problems.	(2)

(c) Study Figure 5b.

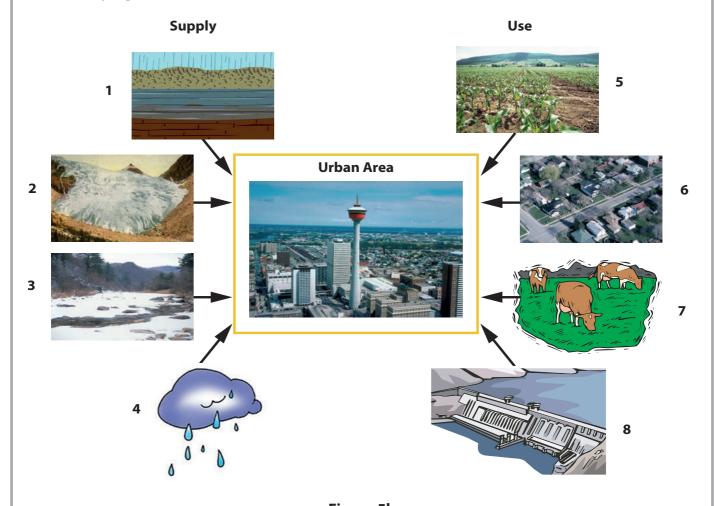


Figure 5b

Water supply and use in a large city and the surrounding area

- (i) Identify water supply or use 2 and 7 using the list below.
  - **A** groundwater
  - **B** snow melt
  - **C** precipitation
  - **D** glacial melt
  - **E** irrigation of crops
  - **F** households
  - **G** leisure
  - **H** cattle farming

Supply/Use 2 .....

Supply/Use 7

(2)



(ii) Outline <b>one</b> way water use is managed in an urban area.	(2)
(d) Using examples, explain the different methods used to obtain water on a <b>local</b> scale.	(4)

*(e) Explain why HICs are facing an increasing demand for water.				
(		tuation and grammar = 4 ma		
(Total for Question 5 = 24 marks)				

TOTAL FOR SECTION B = 24 MARKS
TOTAL FOR PAPER = 69 MARKS

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