

Write your name here

Surname

Other names

Centre Number

Candidate Number

Edexcel GCSE

Geography A

Unit 2: The Natural Environment

Foundation Tier

Monday 24 January 2011 – Morning

Time: 1 hour

Paper Reference

5GA2F/01

You must have:

Resource Booklet (enclosed)

Total Marks

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 only **one** question from questions 1, 2, 3 **or** 4.
- In Section **B** answer **either** question 5 **or** 6.
- Answer the questions in the spaces provided
– *there may be more space than you need.*

Information

- The total mark for this paper is 50.
- 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.*

Advice

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

Turn over ►

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H 3 8 0 4 2 A 0 1 3 2

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SECTION A – THE PHYSICAL WORLD

Answer only ONE question from Section A.

Indicate which question you are answering by marking a cross ☒. If you change your mind, put a line through the box ☒ and then indicate your new question with a cross ☒.

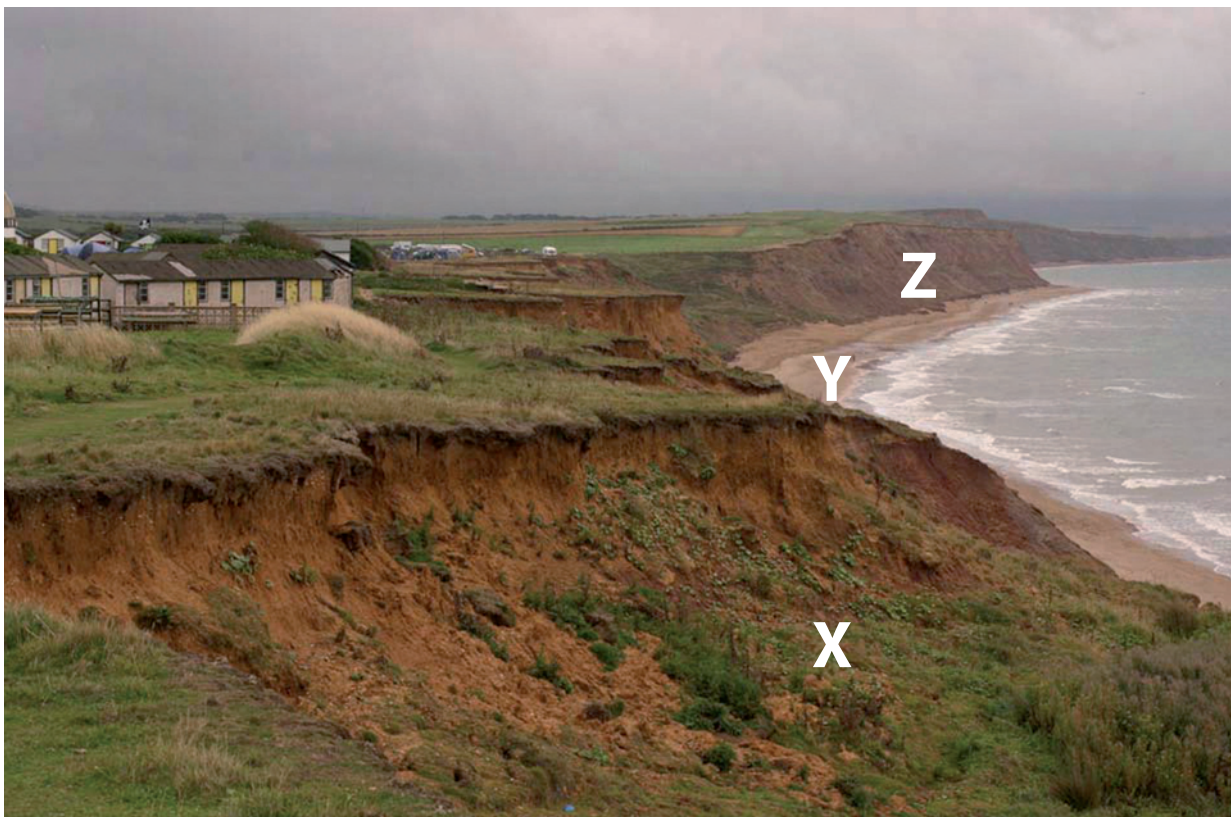
Some questions must be answered with a cross in a box ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

Topic 1: Coastal Landscapes

If you answer Question 1 put a cross in this box ☒

1 (a) Look at Figure 1a.

It shows Compton Bay on the Isle of Wight.



(Source: Lis Parham)

Figure 1a

(i) What process has occurred at X?

(1)

- A attrition
- B soil creep
- C hydraulic action
- D slumping



(ii) Name landforms **Y** and **Z** shown in Figure 1a.

(2)

Y

Z

(iii) Label **three** features of a constructive wave on the wave outline shown in Figure 1b below.

(3)



Figure 1b

(iv) Waves have a swash and backwash.

What is meant by the term **swash**?

(1)

- A** the movement of water up the beach as it breaks
- B** the breaking of a wave
- C** the erosion caused by a wave
- D** the movement of water down the beach to the sea, due to gravity



H 3 8 0 4 2 A 0 3 3 2

(b) Look at Figure 1c (photograph) in the Resource Booklet.

It shows a beach with groynes in Swanage.

(i) Are these groynes an example of hard or soft engineering?

(1)

(ii) How do groynes help to protect cliffs from erosion?

(1)

- A** they allow waves to break against the groyne reducing wave energy
- B** they trap sediment which absorbs wave energy
- C** they act as a barrier to the cliffs stopping erosion
- D** they stop powerful destructive waves coming onshore

(iii) Beach nourishment is a type of soft engineering.

State **one** advantage and **one** disadvantage of beach nourishment.

(2)

Advantage

Disadvantage

(iv) Long-shore drift is the

(1)

- A** movement of sediment out to sea
- B** movement of sediment up the beach
- C** movement of sediment along the beach
- D** build up of sediment in large piles



(v) Complete the sentences to explain how a spit forms.

Use some of the words in the box below.

(5)

erosion coastline deposition curved shallow beach estuary

A spit is a landform of which sticks out from the coast.

It forms where the changes shape, for example at an

Sand is carried by the process of long-shore drift.

It is deposited in calm, water to form a spit.

Spits can be by the action of wind and waves.

(c) The length of the fetch and the geology of an area can affect the rate of coastal recession.

Outline how.

(4)

1 Length of the fetch affects the rate of coastal erosion.

.....
.....
.....
.....

2 Geology affects the rate of coastal erosion.

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Question 2 is on the next page



H 3 8 0 4 2 A 0 7 3 2

Topic 2: River Landscapes

If you answer Question 2 put a cross in this box

2 (a) Look at Figure 2a.

It shows the drainage basin of the River Seine in France.

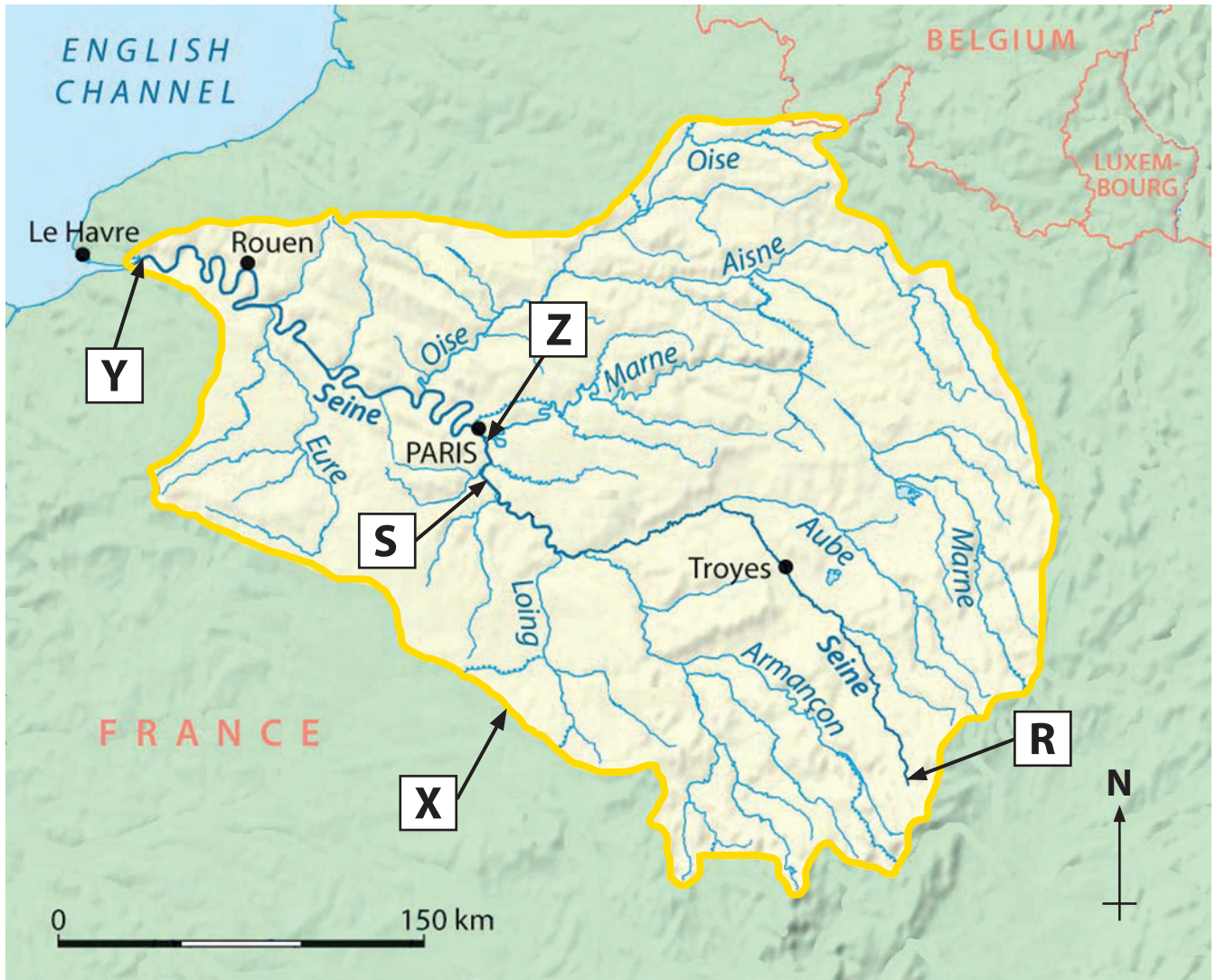


Figure 2a

(i) **X** is a feature of a drainage basin.

Name feature **X**.

(1)

- A** source
- B** mouth
- C** tributary
- D** watershed



(ii) Name drainage basin features **Y** and **Z** shown on Figure 2a.

(2)

Y

Z

(iii) The diagrams below show the River Seine on Figure 2a at point **R** and point **S**.

Complete the boxes on Figure 2b to show the changes to width, depth, velocity and gradient as the River Seine flows downstream.

One has been done for you.

(3)

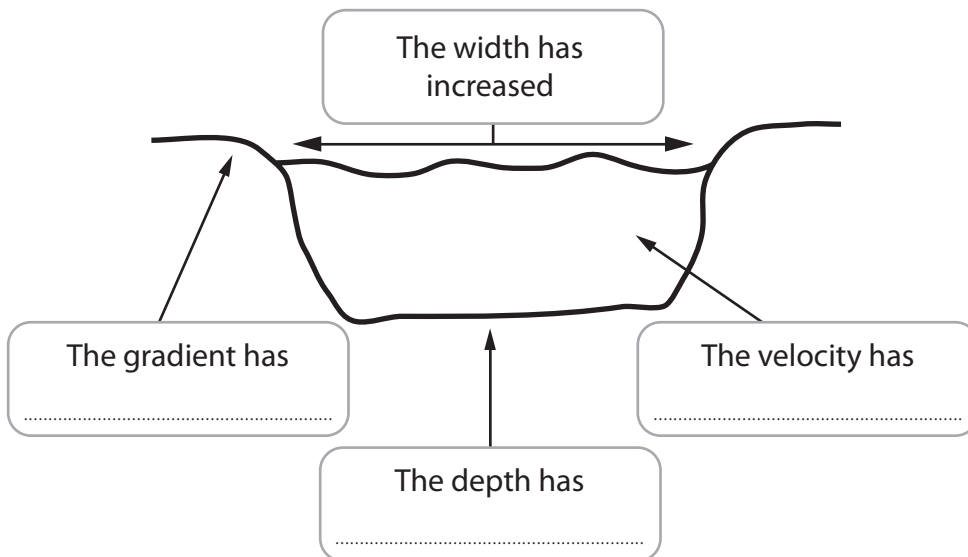
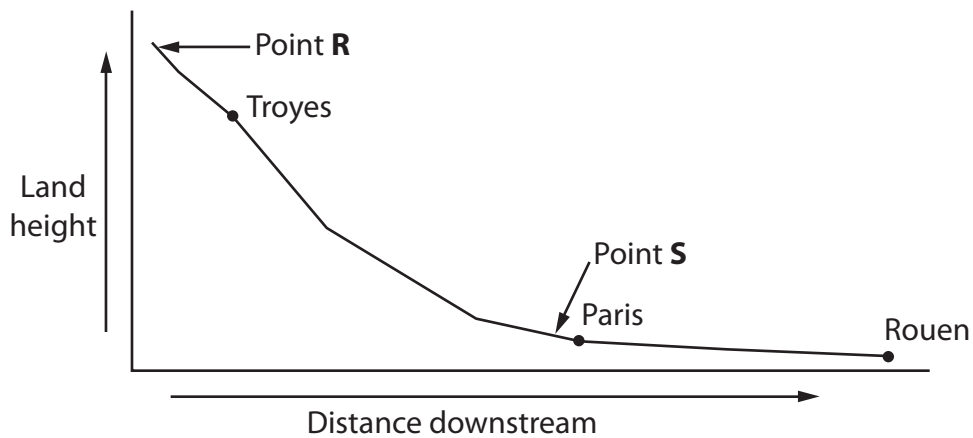


Figure 2b



(iv) As a river flows towards its mouth the discharge increases.

What is discharge?

(1)

- A** the amount of pebbles carried by the river at a given place
- B** the amount of water passing a specific point in a river at a given time
- C** the speed of the water in the river at a given time
- D** the roughness of the river channel at a given place

(b) Look at Figure 2c (photograph) in the Resource Booklet.

It shows a river in Los Angeles, USA.

(i) Is the management shown on Figure 2c an example of hard or soft engineering?

(1)

(ii) This type of management prevents erosion by

(1)

- A** providing a resistant (hard) surface
- B** causing the deposition of sediment
- C** slowing down the flow of water
- D** allowing the river to flood

(iii) An advantage of floodplain zoning is that

(1)

- A** it costs nothing
- B** it costs less than other types of management
- C** floodplains are turned into marshland
- D** it provides a good place for boats



(iv) Afforestation is a type of soft engineering.

State **one** advantage and **one** disadvantage of afforestation.

(2)

Advantage

.....

.....

Disadvantage

.....

.....

(v) Complete the sentences to outline the formation of a waterfall.

Use some of the words in the box below.

(5)

bands hard soft gorge permeable drop meander

Waterfalls occur when there is a sudden in the course of a river.

This happens as a river crosses of hard and soft rock.

The rock is worn back leaving an overhang of rock.

The overhang of rock eventually collapses into the plunge pool.

Over time a is formed as the waterfall retreats upstream.



Topic 3: Glaciated Landscapes

If you answer Question 3 put a cross in this box

3 (a) Look at Figure 3a.

It shows a satellite image of a glaciated upland in North Wales.

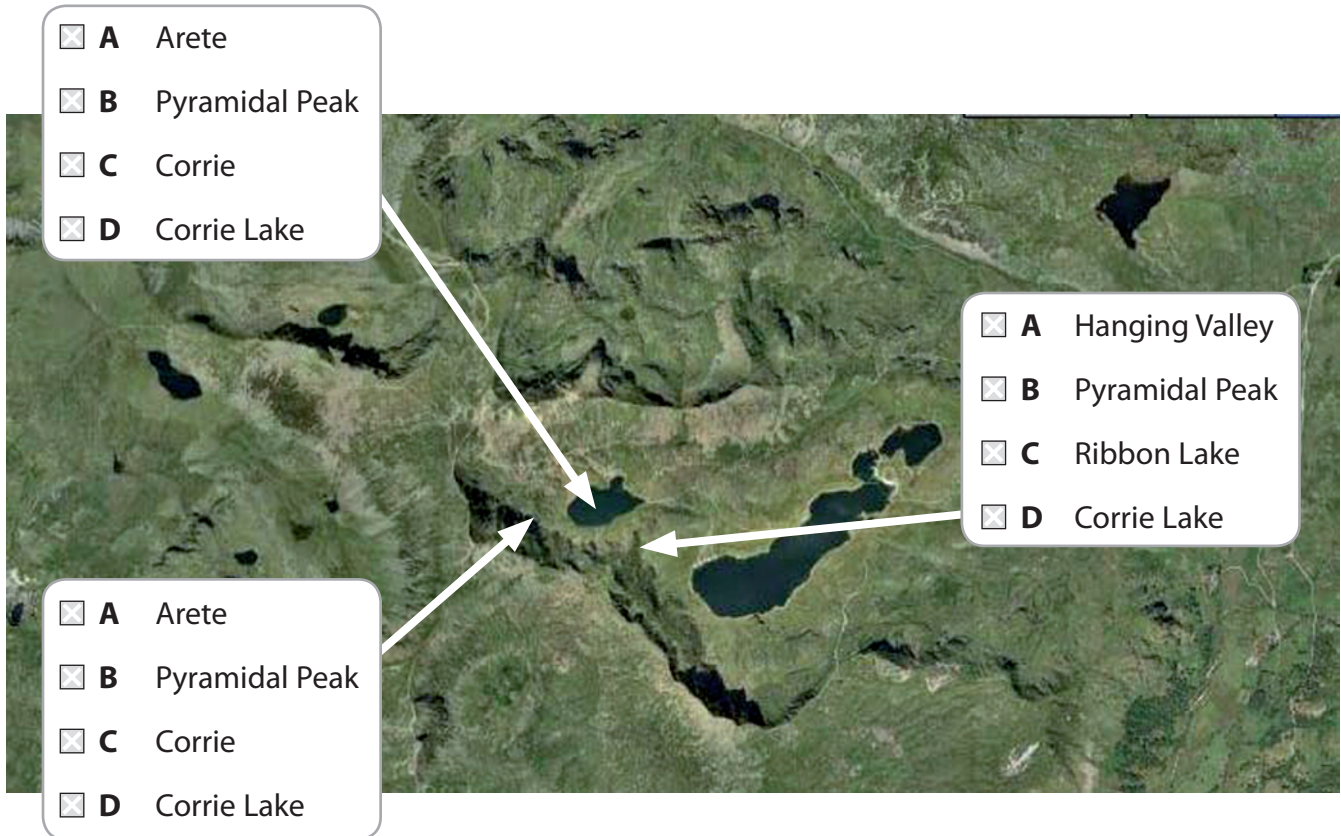


Figure 3a

(i) Name the landforms shown in Figure 3a.

Put a cross in each of the three boxes next to the correct landform.

(3)

(ii) Suggest **two** uses of glaciated upland areas such as the area shown in Figure 3a.

(2)

1

.....

2

.....



H 3 8 0 4 2 A 0 1 3 3 2

- (iii) The diagram below shows a rock.
Freeze thaw weathering has affected this rock.
Label Figure 3b to show what has happened.

(3)



Figure 3b

- (iv) Abrasion is a process of glacial erosion.

What is meant by abrasion?

(1)

- A** pressure from the glacier resulting in a rock being pulled from the valley side
- B** the process of adding snow to the glacier to encourage erosion
- C** rocks carried by the glacier wearing away the valley sides
- D** sunlight causing rocks to expand and crack



(b) Look at Figure 3c (photograph) in the Resource Booklet.

It shows a glaciated area in Pakistan.

(i) Name the **two** types of moraine shown in Figure 3c.

(2)

1

2

(ii) Lodgment is a process of glacial deposition.

Lodgment is where the

(1)

- A** glacier presses material to the valley floor as it advances or retreats
- B** material falls off the top of the glacier to the side
- C** material is carried within a glacier
- D** material is dropped by the glacier as the ice melts

(iii) Complete the sentences to describe features of an erratic.

Use some of the words in the box below.

(5)

transported great boulders deposited eroded drumlins short

Most erratics are large which are by glaciers.

Often they are dropped a distance from where they were

The rock type of an erratic is different from that where it is



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Question 4 is on the next page

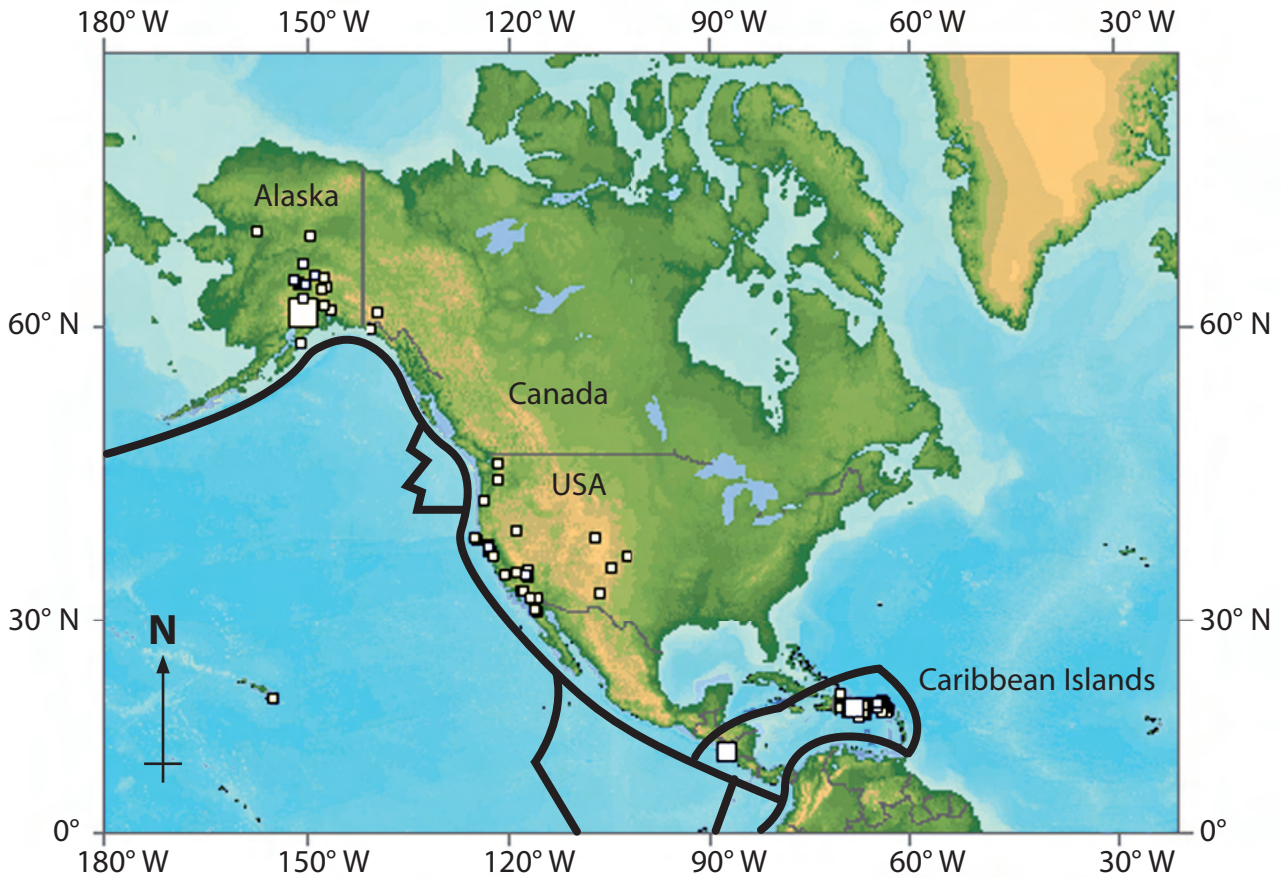


Topic 4: Tectonic Landscapes

If you answer Question 4 put a cross in this box

4 (a) Look at Figure 4a.

It shows the magnitude of earthquakes on 23rd August 2009.



Magnitude of Earthquake >7 6 5 4 2.5

Figure 4a

(i) Which area on Figure 4a had the largest earthquake magnitude?

(1)

- A Alaska
- B USA
- C Canada
- D Caribbean Islands



(ii) Put a cross next to **three** of the words or phrases below which best describe the distribution of the earthquakes shown on Figure 4a.

(3)

- linear
- dispersed
- at plate boundaries
- near the coast
- under the sea

(iii) Part of the plate boundary shown on Figure 4a is a convergent plate boundary.

State **two** characteristics of a convergent plate boundary.

(2)

1

.....

2

.....

(iv) Using Figure 4b below label the characteristics of an earthquake focus in the boxes provided.

(2)

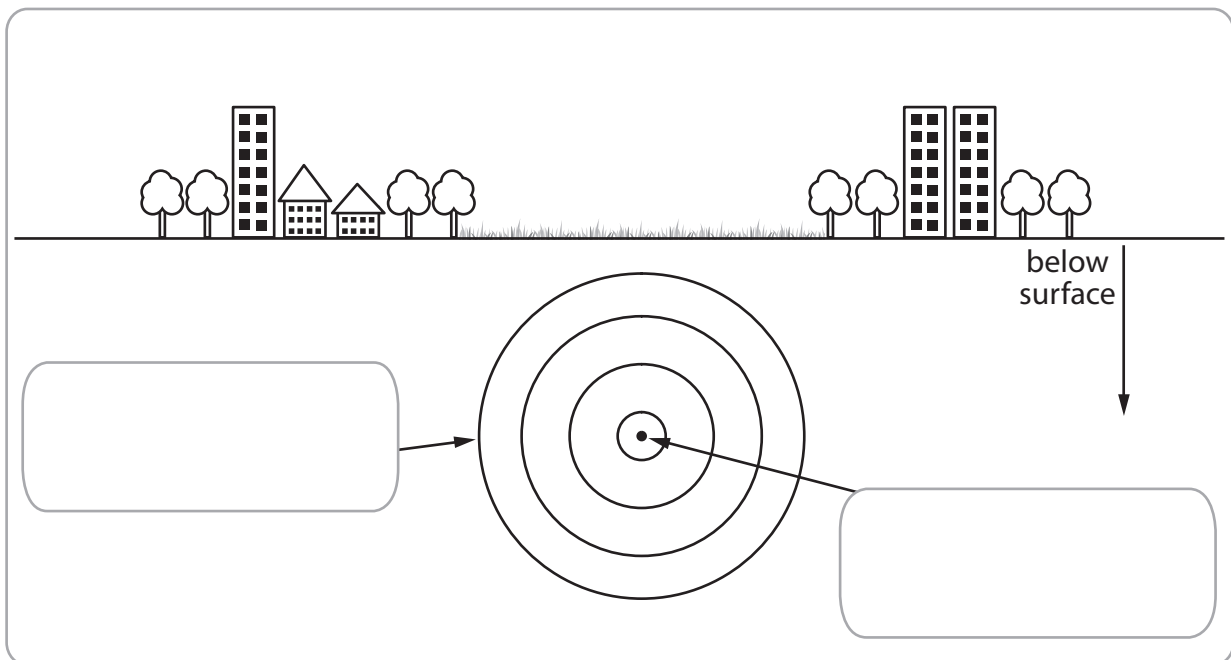


Figure 4b



(v) The Mercalli scale measures the (1)

- A** number of vibrations
- B** number of houses left standing
- C** the distance between the focus and epicentre
- D** the amount of damage caused

(b) Look at Figure 4c (satellite image) in the Resource Booklet.

It shows Arrecife on the volcanic island of Lanzarote.

(i) What is the main human activity shown at **P** on Figure 4c? (1)

- A** settlement
- B** farming
- C** fishing
- D** geothermal energy

(ii) How many volcanic cones are there on Figure 4c? (1)

(iii) The following are reasons for people living near a volcano.

Which is an **economic** reason? (1)

- A** people have always lived there
- B** the belief that a volcano is spiritual
- C** the chance of a future eruption is low
- D** tin, silver and gold can be mined



(iv) Complete the sentences to explain the formation of a hotspot volcano.

Use some of the words in the box below.

(5)

magma chains erupts continental oceanic surface explodes

Hotspot volcanoes are formed when rises to the surface.

The magma through the oceanic crust.

Lava builds up on the over time to form volcanic islands.

As the crust moves over the hotspot,

..... of islands develop.

(c) Outline **two** ways in which the effects of an earthquake can be reduced.

(4)

1

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2

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Section B is on the next page



SECTION B – ENVIRONMENTAL ISSUES

Answer EITHER Question 5 OR Question 6.

Topic 5: A Wasteful World

If you answer Question 5 put a cross in this box

5 (a) Look at Figure 5a.

It shows percentage recycling rates for Greater London.

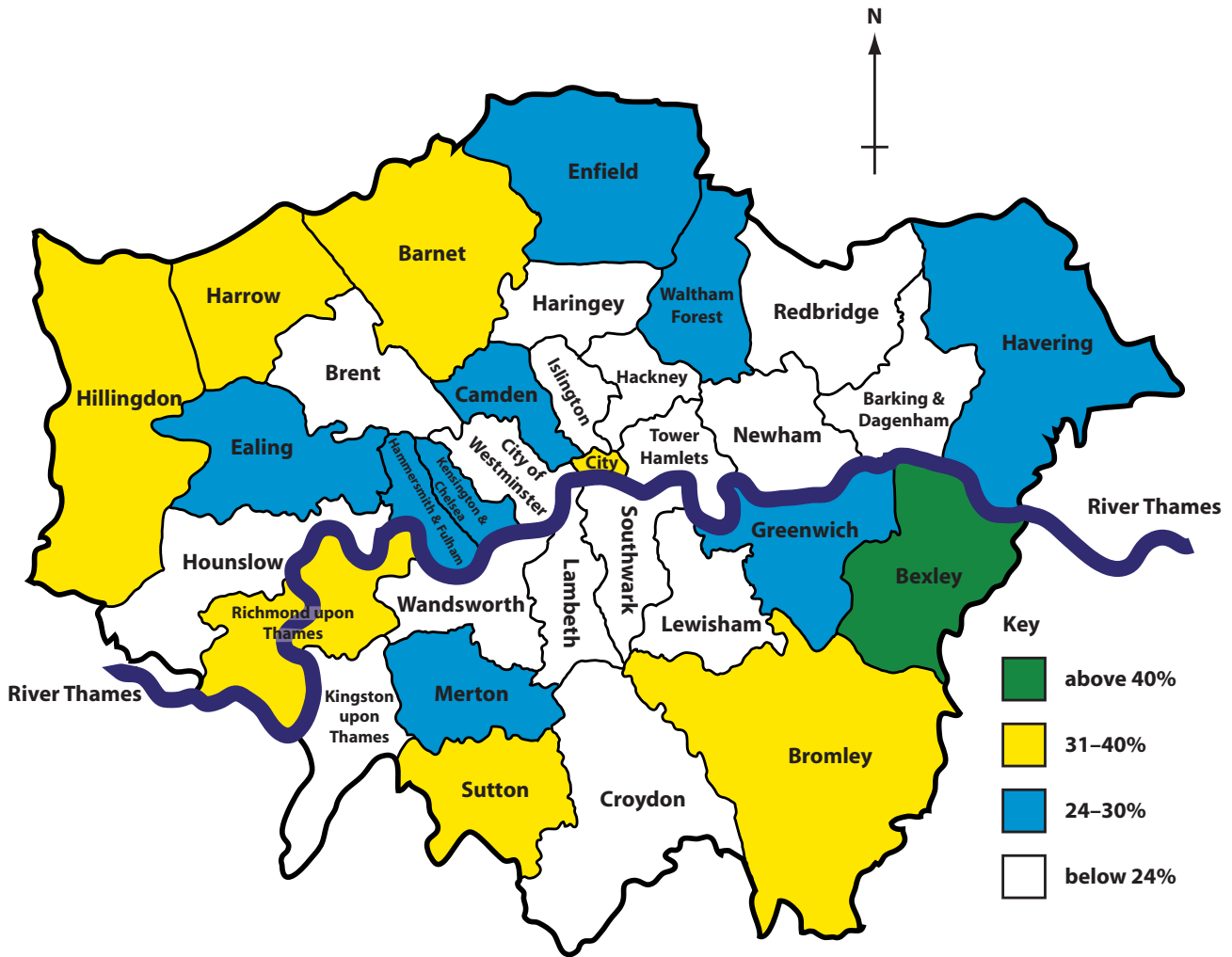


Figure 5a

(i) Which Greater London borough has the highest recycling rate?

(1)

- A Croydon
- B Barnet
- C Bexley
- D Brent



(ii) How many Greater London boroughs had a recycling rate below 24%?

(1)

- A 8
- B 9
- C 15
- D 16

(iii) Three of the phrases below describe the distribution of Greater London boroughs with recycling rates 31% and over.

Put a cross next to the **three** phrases.

(3)

- near the edge of Greater London
- in the west of Greater London
- in the centre of Greater London
- in the north-east of Greater London
- in the south-east of Greater London

(iv) State **two** types of domestic waste.

(2)

1

2



(v) Outline how **one** High Income Country (HIC) disposes of its waste.

(4)

Chosen HIC

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(b) Look at Figure 5b in the Resource Booklet.

It is a cartoon about a source of energy.

(i) Which type of energy is shown in Figure 5b?

(1)

- A** nuclear
- B** renewable
- C** coal power
- D** non renewable

(ii) Describe the **disadvantages** of the source of energy shown in Figure 5b.

(2)

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Topic 6: A Watery World

If you answer Question 6 put a cross in this box

6 (a) Look at Figure 6a.

It is a map showing outbreaks of cholera.

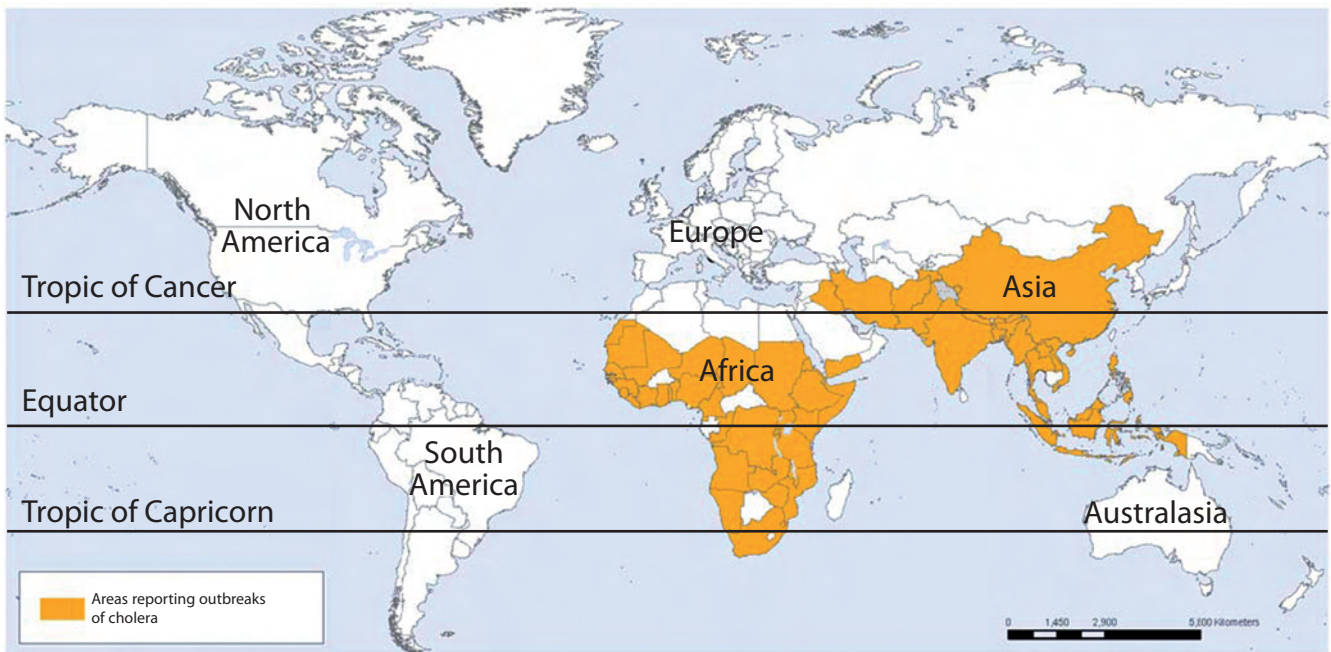


Figure 6a

(i) Which continent has outbreaks of cholera?

(1)

- A Asia
- B North America
- C Europe
- D South America



(ii) Three of the phrases below describe the distribution of countries with outbreaks of cholera.

Put a cross next to the **three** phrases.

(3)

- all the countries between the Tropics
- in UK and France (Europe)
- some countries in Africa
- no countries in South America
- some countries near the Equator

(iii) Describe how a lack of clean water can lead to an increase in diseases such as cholera.

(2)

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(b) Look at Figure 6b (photograph) in the Resource Booklet.

It shows Bewl Water, a reservoir in Kent.

(i) Suggest **two** problems caused by creating reservoirs such as Bewl Water.

(2)

1

2

(ii) Which human activity might be found on Bewl Water?

(1)

- A** whale watching
- B** windsurfing
- C** hill walking
- D** mining



(iii) Water surpluses are likely to occur in areas with

(1)

- A** high rainfall and high temperatures
- B** low rainfall and high temperatures
- C** high rainfall and low temperatures
- D** low rainfall and low temperatures

(iv) Complete the sentences to help explain how a lack of water can cause problems on the Spanish Costas.

Use some of the words in the box below.

(5)

golf pressure sunshine demand tourists rainfall golfers

There is very little in the summer months on the Spanish Costas.

This encourages to come to the area.

This causes a for water which is larger than supply.

Some tourists demand courses which use a lot of water.

This can lead to on the local water supply.



(c) Low Income Countries (LICs) use appropriate technology to provide water for small communities.

Outline how.

(4)

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Edexcel GCSE

Geography A

Unit 2: The Natural Environment

Paper 2F and 2H

Monday 24 January 2011 – Morning

Resource Booklet

Paper Reference

5GA2F/01

5GA2H/01

Do not return the Resource Booklet with the question paper.

Information

This Resource Booklet contains maps and photographs needed for use with the Unit 2: The Natural Environment examination.

This Resource Booklet is for use with foundation tier and higher tier.

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SECTION A – THE PHYSICAL WORLD

Topic 1: Coastal Landscapes



Figure 1c

Topic 2: River Landscapes



Figure 2c

Topic 3: Glaciated Landscapes



Figure 3c

Topic 4: Tectonic Landscapes



Figure 4c

SECTION B – ENVIRONMENTAL ISSUES

Topic 5: A Wasteful World

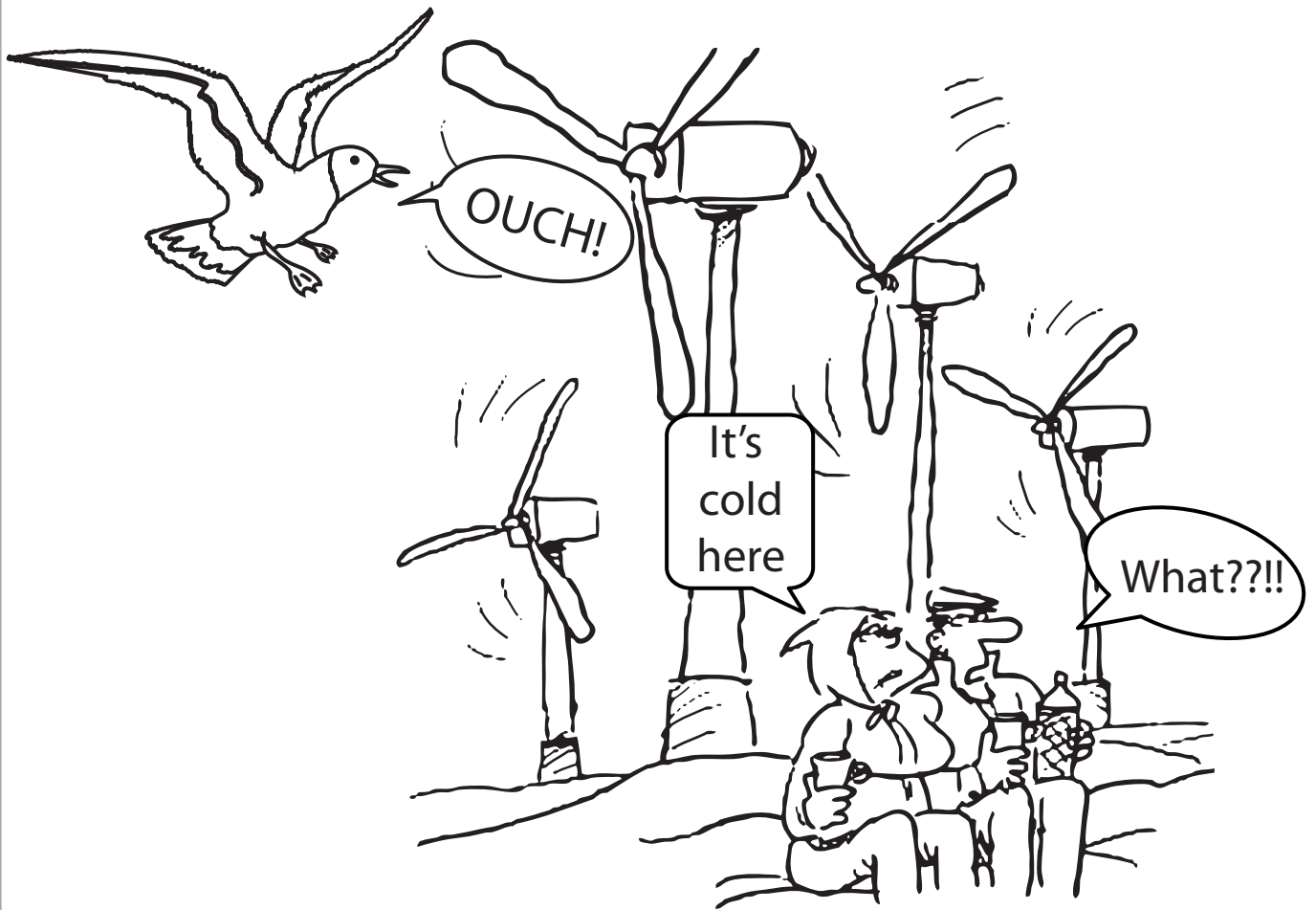


Figure 5b

Topic 6: A Watery World



Figure 6b

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