

OXFORD CAMBRIDGE AND RSA EXAMINATIONS
GCSE (9–1)
J384/01
GEOGRAPHY B
(GEOGRAPHY FOR ENQUIRING MINDS)
Our Natural World

TUESDAY 22 MAY 2018: Afternoon
TIME ALLOWED: 1 hour 15 minutes
plus your additional time allowance

MODIFIED ENLARGED

First name		Last name	
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Centre number						Candidate number				
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YOU MUST HAVE:
the Resource Booklet

YOU MAY USE:
a scientific or graphical calculator
a ruler (cm/mm)

READ INSTRUCTIONS OVERLEAF



INSTRUCTIONS

The separate Resource Booklet will be found with this document.

Use black ink. You may use an HB pencil for graphs and diagrams.

Complete the boxes on the front page with your name, centre number and candidate number.

Answer ALL the questions.

Write your answer to each question in the space provided. If additional space is required, use the lined page(s) at the end of this booklet. The question number(s) must be clearly shown.

INFORMATION

The total mark for this paper is 70.

The marks for each question are shown in brackets [].

Quality of extended responses will be assessed in questions marked with an asterisk (*).

Spelling, punctuation and grammar and the use of specialist terminology (SPaG) will be assessed in questions marked with a pencil (✎).

SECTION A

Answer ALL the questions.

Global Hazards

1 (a) Define the term extreme weather.

[1]

(b) Study FIG. 1 in the separate Resource Booklet, maps showing atmospheric and ocean circulation in the Pacific during a normal year and an El Niño year.

Using FIG. 1, suggest how South America may be affected during an El Niño year.

[3]

(c) Study the table below showing the frequency of some hazard events between 1980 and 2015.

Year	Number of events per year		
	Earthquakes	Tropical Storms	Floods
1980	25	41	38
1985	21	55	52
1990	30	70	70
1995	26	69	78
2000	37	72	160
2005	40	130	182
2010	50	81	185
2015	33	90	152

Select the most suitable graphical technique for presenting the number of flood events column. [1]

- A Bar graph**
- B Climate graph**
- C Line graph**
- D Pie chart**

Write the correct letter in the box.

[illegible]

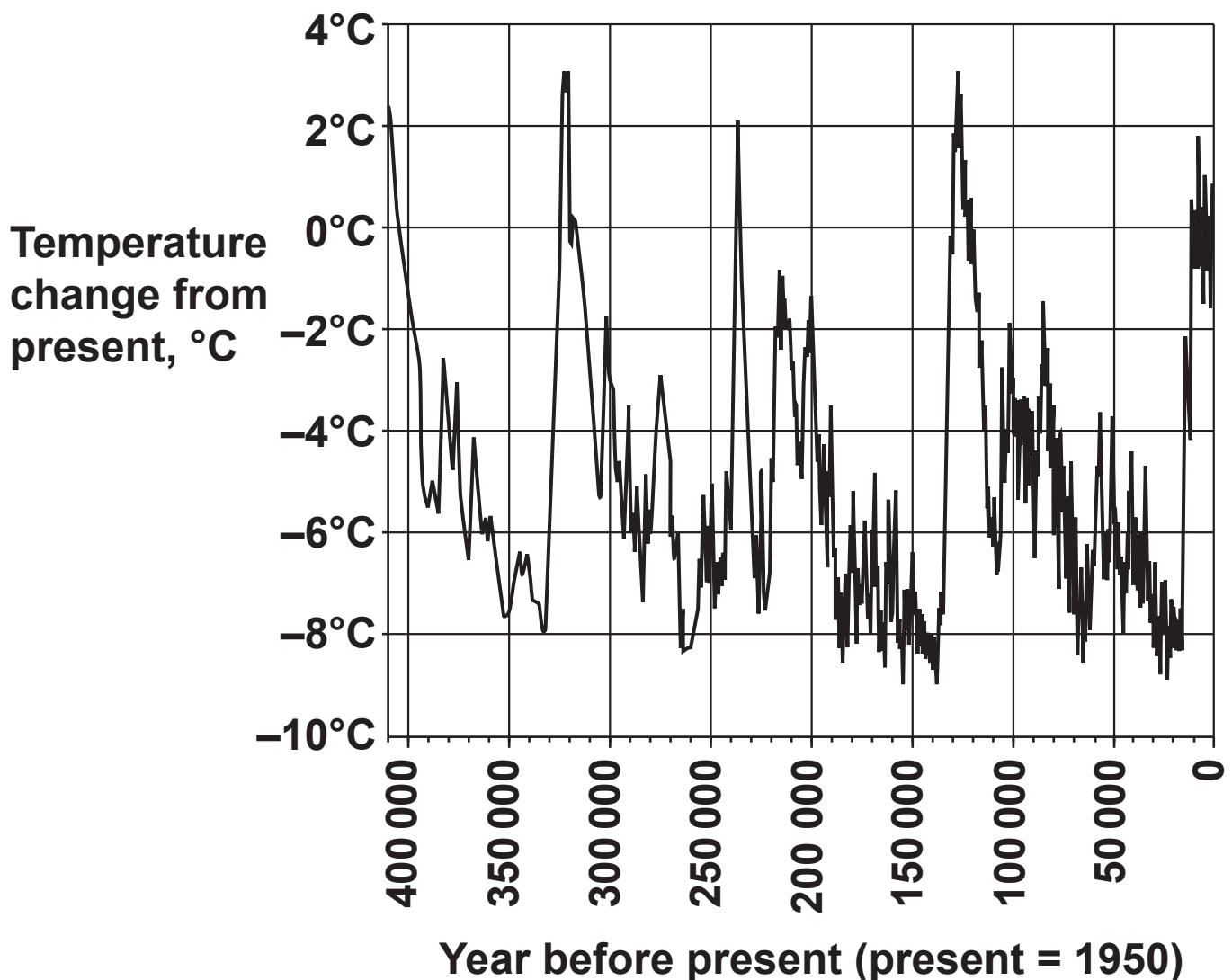
Changing Climate

2 (a) Choose the correct definition of climate change. [1]

- A Global warming.
- B Large-scale, long-term changes in average temperatures and weather patterns.
- C The difference in temperature and weather during different seasons.
- D The short-term warming of the Earth.

Write the correct letter in the box.

(b) The graph below shows the changes in global temperature over the last 400 000 years.



Using data from the graph, describe the trend shown.

[4]

- (c) Study FIG. 2 in the separate Resource Booklet, a painting from 1677 of the frozen River Thames.**

Explain how this painting could be used as evidence for climate change.

[2]

(d) Suggest why climate change is considered to be a global issue.

[6]

Distinctive Landscapes

- 3 (a) Study FIG. 3 in the separate Resource Booklet, a relief map of the UK.

What type of map is this? [1]

- A Choropleth
- B Flow line
- C Isoline
- D Thematic

Write the correct letter in the box.

- (b) Using FIG. 3, suggest which type of natural landscape is likely to be found at X.

_____ [1]

- (c) Using FIG. 3, describe the distribution of upland areas in the UK.

_____ [3]

(d) Select which graphical technique best suits the data listed below. One has been done for you. [2]

The rate at which different rock types erode

Rose chart

The rate of erosion of rocks at one place over time

Pie chart

The orientation of pebbles on a river bed

Bar graph

The different rock types found in a river deposit

Line graph

(e) Case study – the landscape of a UK river basin.

Discuss the influence of geology in the formation of river landforms within your chosen river basin.

Name of chosen river basin in the UK:

[6]

Sustaining Ecosystems

4 (a) Select the correct definition of an ecosystem. [1]

- A A type of tourism that protects the environment.
- B The interconnectedness of environments.
- C The interdependence of plants and animals with the environment they live in.
- D The place where animals and plants live.

Write the correct letter in the box.

(b) Name TWO features of Arctic flora.

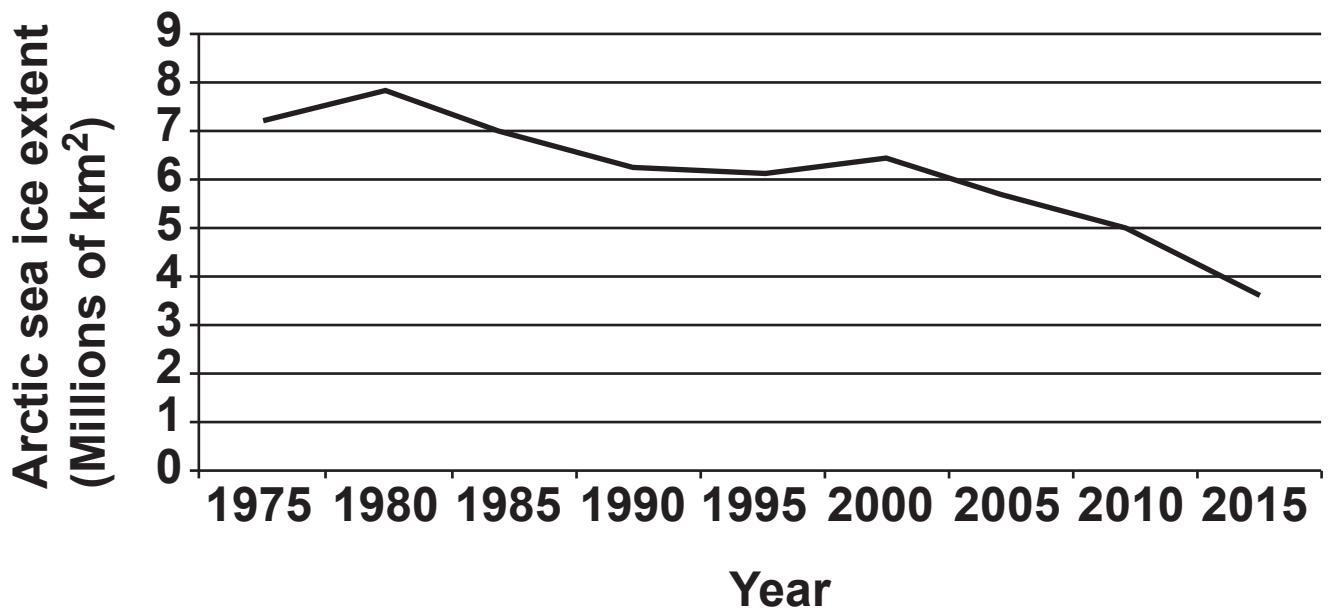
1 _____

2 _____

[2]

- (c) The graph and table below show the average September Arctic sea ice extent between 1975 and 2015.

September Arctic sea ice extent from 1975-2015



Year	Arctic sea ice extent (1 000 000 sq km)
1975	7.2
1980	7.8
1985	6.9
1990	6.2
1995	6.1
2000	6.4
2005	5.6
2010	4.9
2015	3.6

Which of these statements describing the trend shown on this graph is true? [1]

- A The sea ice extent in 1975 and 1985 was the same.**
- B The sea ice has decreased most rapidly between 1985 and 2000.**
- C The sea ice has decreased most rapidly between 2000 and 2015.**
- D The sea ice has rapidly increased from 2000 to 2015.**

Write the correct letter in the box.

(d) Why are tropical rainforest soils considered to be amongst the poorest in the world?

[3]

SECTION B

Answer ALL the questions.

Physical Geography Fieldwork

5 (a) Study the table below, which shows the results of an investigation into longshore drift.

Groyne Number	Drop North side (cm)	Drop South side (cm)	Difference
1	27	41	14
2	31	51	20
3	28	44	16
4	25	39	14
5	32	54	22

Using data from the table, describe the pattern in the longshore drift data collected.

[4]

- (b) Study FIG. 4 in the separate Resource Booklet, students' data presentation from physical geography fieldwork data.**

A student has used GIS to present their findings on changes in beach sediment size.

Suggest what FIG. 4 indicates about the pattern of beach sediment size along the shore.

[2]

- (c) State ONE way you could adapt FIG. 4 to make it more informative.**


[1]

(d)* You will have carried out some physical geography fieldwork as part of your GCSE Geography course.

Name the fieldwork _____

To what extent was your primary data collection successful?

[8]

 **Spelling, punctuation and grammar and the use of specialist terminology [3]**

END OF QUESTION PAPER

ADDITIONAL ANSWER SPACE

If additional space is required, you should use the following lined page(s). The question number(s) must be clearly shown in the margin(s).

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