Please check the examination details below before entering your candidate information

Candidate surname	Other names

Pearson Edexcel Level 3 GCE

Centre Number | Candidate Number

Wednesday 22 May 2019

Afternoon (Time: 2 hours 15 minutes) | Paper Reference **9GE0/01**

Geography

Advanced

Paper 1

You must have:
Resource Booklet (enclosed)
Ruler, calculator

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.
- Answer **all** questions in Section **A** and Section **C**.
- Answer **either** Question 2 **or** Question 3 in Section **B**.
- Answer the questions in the spaces provided
  – *there may be more space than you need.*
- Calculators may be used.
- Any **calculations** must show **all** stages of **working out** and a **clear answer**.

Information

- The total mark for this paper is 105.
- The marks for **each** question are shown in brackets
  – *use this as a guide as to how much time to spend on each question.*

Advice

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

Turn over ▶

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SECTION A: TECTONIC PROCESSES AND HAZARDS

Answer ALL questions in this section. Write your answers in the spaces provided.

You must use the Resource Booklet provided.

1 (a) Study Figure 1 in the Resource Booklet.

This is part of an investigation into the spatial impacts of tsunami events.

(i) Calculate the mean number of deaths recorded.

(1)

Mean = ...

(ii) Calculate the median number of deaths recorded.

(1)

Median = ...

(iii) Calculate the interquartile range for the number of deaths recorded.

You must show your working.

(2)

Interquartile range = ...

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(b) Assess the reasons why managing the impacts of tectonic hazards varies in its effectiveness.

(12)

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(Total for Question 1 = 16 marks)

TOTAL FOR SECTION A = 16 MARKS

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SECTION B: LANDSCAPE SYSTEMS, PROCESSES AND CHANGE

Answer ONE question in this section – EITHER Question 2 OR Question 3.

Glaciated Landscapes and Change

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

If you answer Question 2 put a cross in the box ☒ .

You must use the Resource Booklet provided.

2 Study Figure 2a in the Resource Booklet.

(a) Explain the contribution of glacial erosional processes to the development of this landscape.

(6)

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Study Figure 2b in the Resource Booklet.

(b) Explain the contribution of glacial deposition to the development of this landscape.

(6)

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(c) Explain why a range of approaches is needed to manage glaciated landscapes.

(8)

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(d) Evaluate the view that the rate of glacier movement is mainly determined by variations in the mass balance of a glacier.

(20)

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(Total for Question 2 = 40 marks)

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Do not answer Question 3 if you have answered Question 2.

Coastal Landscapes and Change

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

If you answer Question 3 put a cross in the box ☒ .

You must use the Resource Booklet provided.

3 Study Figure 3a in the Resource Booklet.

(a) Explain the contribution of marine erosional processes to the development of this landscape.

(6)

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Study Figure 3b in the Resource Booklet.

(b) Explain the contribution of coastal deposition to the development of this landscape.

(6)

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(c) Explain why a range of approaches is needed to manage coastal landscapes.

(8)

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(d) Evaluate the view that coastal flood risks are increasing mainly because of rising sea levels.

(20)

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(Total for Question 3 = 40 marks)

TOTAL FOR SECTION B = 40 MARKS

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SECTION C: PHYSICAL SYSTEMS AND SUSTAINABILITY

Answer ALL questions in this section. Write your answers in the spaces provided.

You must use the Resource Booklet provided.

4 (a) Study Figure 4a in the Resource Booklet.

Explain **one** impact of the changes in biofuel production in Brazil on the carbon cycle.

(3)

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(b) Explain why the level of economic development affects the energy mix of countries.

(6)

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(c) Explain why there are uncertainties about future levels of carbon release from peatlands and permafrost.

(8)

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(d) Study Figure 4b in the Resource Booklet.

Assess the role of physical factors in influencing the pattern of future water stress.

(12)

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(e) Evaluate the view that large-scale water management projects often create more problems than they solve for people and the environment.

(20)

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(Total for Question 4 = 49 marks)

TOTAL FOR SECTION C = 49 MARKS
TOTAL FOR PAPER = 105 MARKS

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Geography

Advanced

Paper 1

Resource Booklet

Do not return this Resource Booklet with the question paper.

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SECTION A

The following resource relates to Question 1.

Year	Location	Deaths recorded
1979	Colombia	600
1991	Costa Rica	2
1992	Nicaragua	170
1995	Mexico	1
1996	Peru	12
2001	Peru	26
2007	Chile	10
2007	Peru	3
2010	Chile	156
2015	Chile	8
Summary Statistics		
Number of tsunami events		10
Deaths recorded		988
Mean		
Median		
Interquartile range		

Figure 1

The number of deaths resulting from tsunami events, Eastern Pacific 1979 - 2015

SECTION B

The following resources relate to Question 2.

Figure 2a

A relict glaciated landscape, North Wales

Figure 2b

A relict glaciated valley landscape, Northern England

The following resources relate to Question 3.

Figure 3a

A coastal landscape, Caribbean

Figure 3b

A coastal plain landscape, Southern England

SECTION C

The following resources relate to Question 4.

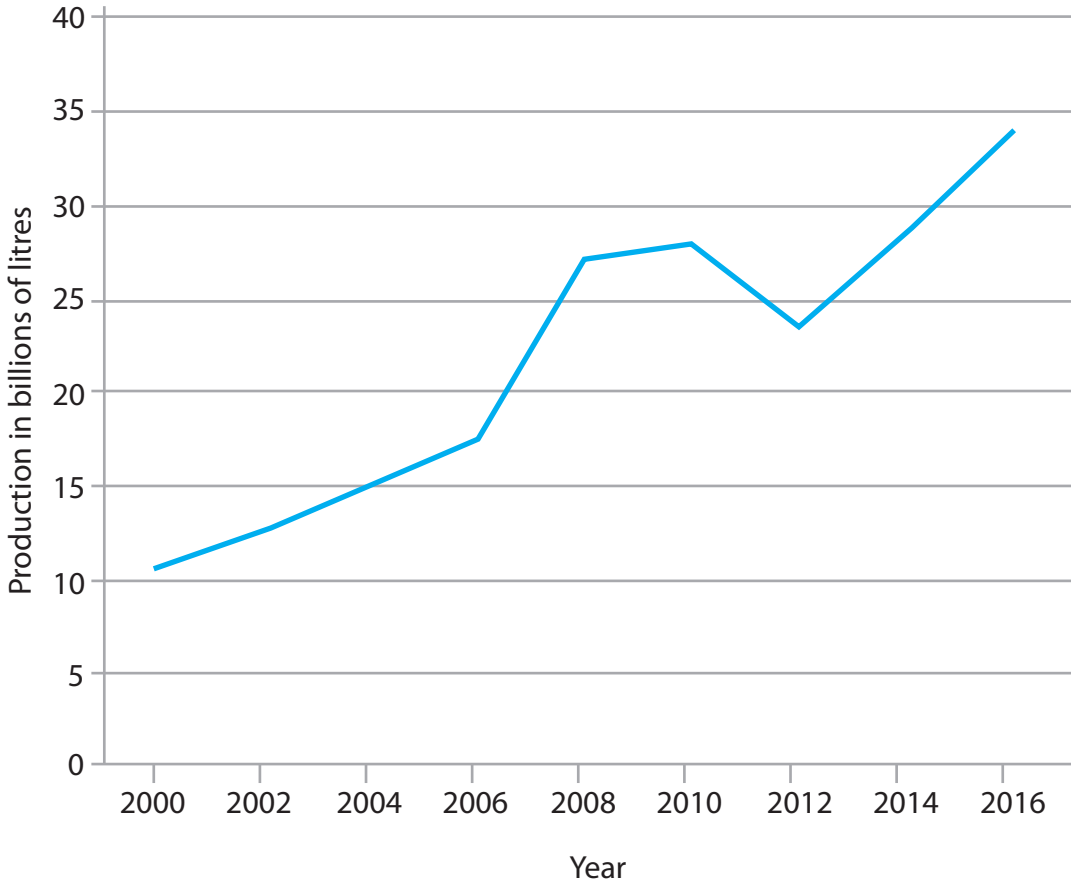

Figure 4a

Biofuel production in Brazil, the world's second largest producer, 2000-2016

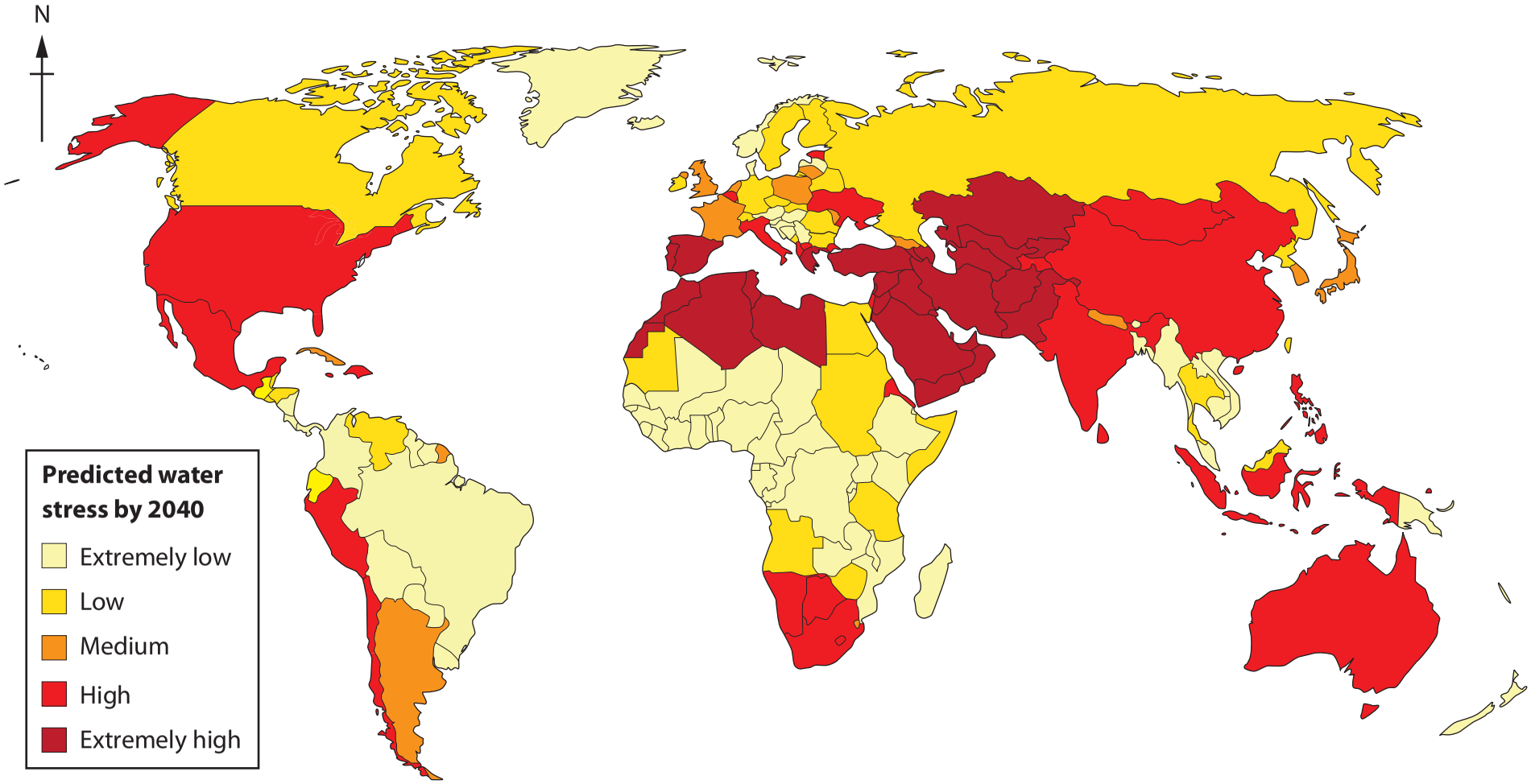

Figure 4b

Predicted world water stress, 2040

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