OXFORD

INTERNATIONAL
AQA EXAMINATIONS

Please write clearly in block capitals.

Centre number | | | | | | Candidate number | | | | |

Surname _____

Forename(s) _____

Candidate signature _____

I declare this is my own work.

INTERNATIONAL AS

GEOGRAPHY

Paper 1B Physical Geography 1 Coastal Systems and Landscapes

Friday 19 May 2023 07:00 GMT Time allowed: 1 hour 30 minutes

Materials

For this paper you must have:
- a ruler with millimetre measurements
- a calculator, which you are expected to use where appropriate.

Instructions
- Use black ink or black ball-point pen.
- Fill in the boxes at the top of this page.
- Answer **all** questions.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- All working must be shown.
- If you need extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).
- Do all rough work in this book. Cross through any work you do not want to be marked.

Information
- The marks for questions are shown in brackets.
- The maximum mark for this paper is 80.
- You may use a bilingual dictionary for this exam.
- You may **not** use an English dictionary.

For Examiner's Use	
Question	Mark
1	
2	
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5	
6	
7	
8	
TOTAL	

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ANSWER IN THE SPACES PROVIDED

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Section A – Living with Hazards

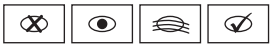
Answer **all** questions in the spaces provided.

You must answer **all** questions in **Section A**.

Only **one** answer per question is allowed.

For each question completely fill in the circle alongside the appropriate answer.

CORRECT METHOD 

WRONG METHODS 

If you want to change your answer you must cross out your original answer as shown. 

If you wish to return to an answer previously crossed out, ring the answer you now wish to select as shown. 

0 1 . 1 Which of the following describes how deep sea trenches are formed?

[1 mark]

A Continental divergence at constructive margins forms rifts between land masses as the lithosphere splits.

B Continental plates at destructive margins become uplifted and buckle to create trenches.

C Subduction of continental crust at constructive margins creates deep troughs in the ocean.

D Subduction of the denser tectonic plate at a destructive margin leads to the bending of that plate at the point of collision.

Question 1 continues on the next page

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0 1 . 2 ‘Following the 2018 wildfires in California, local officials voted on forest management laws. Residents then protested about being automatically enrolled onto emergency wildfire notification systems.’

The statement above outlines which impact of the hazard?

[1 mark]

A Primary economic ⬭

B Primary environmental ⬭

C Secondary economic ⬭

D Secondary political ⬭

0 1 . 3 Which of the following is an example of preparedness to reduce the impact of a tropical storm?

[1 mark]

A Computer-based models to identify, track and communicate about the potential of the tropical storm ⬭

B Education and public awareness campaigns to reduce the chance of people evacuating ⬭

C Immediate humanitarian relief such as search and rescue of impacted areas ⬭

D Monitor locations for signs of seismic activity or areas of bulging ground ⬭

0 1 . 4 Which of the following would be most likely to result in many casualties from falling debris during an earthquake?

[1 mark]

A A deep focus earthquake affecting an economically wealthy community with well-monitored retrofitted buildings ⬭

B An earthquake 100 km from the coastline of a well-protected town, with a 3-metre-high sea wall ⬭

C An earthquake at a constructive margin affecting a rural area with flat land and low-rise buildings ⬭

D A shallow focus earthquake in a densely populated area with many high-rise buildings ⬭

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0 1 . 5 ‘Following the volcanic eruption of Mount Semeru, government agencies evacuated areas at risk of mudflows and distributed surgical masks to reduce ash inhalation.’

The statement above describes which stage of the hazard management cycle for this volcanic eruption?

[1 mark]

A Fatalism ⬭

B Mitigation ⬭

C Recovery ⬭

D Response ⬭

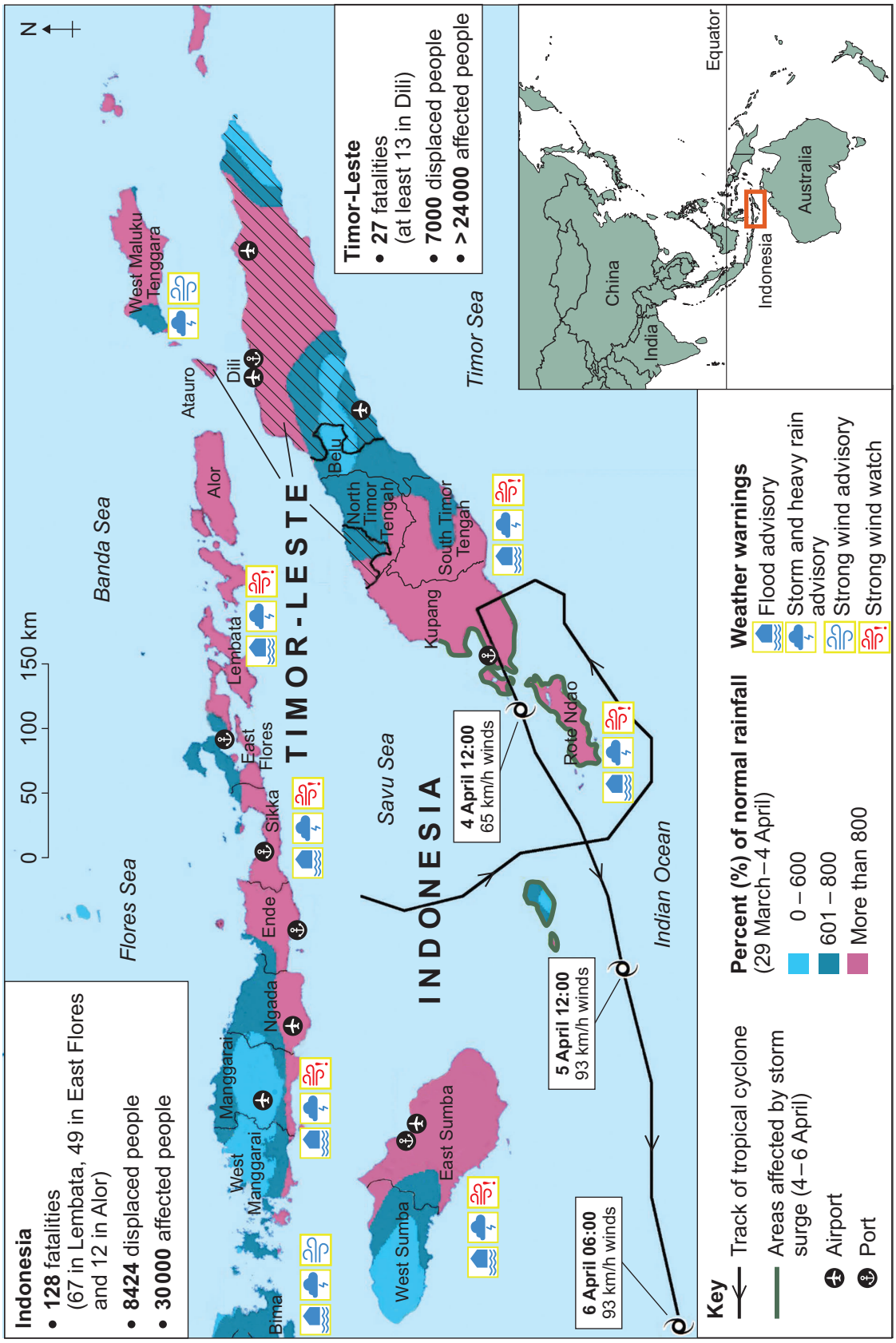
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Turn over for the next question

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0 2 **Figure 1** shows the impacts of Tropical Cyclone Seroja (2021) in Timor-Leste and part of Indonesia.

Figure 1



Do not write outside the box

Analyse the information shown in **Figure 1**.

[6 marks]

Extra space

6

Turn over ▶

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0 3 Evaluate the success of the human responses to a recent seismic event that you have studied.

[9 marks]

Extra space

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9

0 4 ‘Multi-hazardous environments present greater risks to the economy than to the environment.’

Evaluate this statement with reference to a case study of a multi-hazardous environment that you have studied.

[20 marks]

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20

END OF SECTION A

Turn over for Section B

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Section B – Coastal Systems and Landscapes

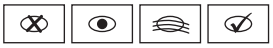
Answer **all** questions in the spaces provided.

You must answer **all** questions in **Section B**.

Only **one** answer per question is allowed.

For each question completely fill in the circle alongside the appropriate answer.

CORRECT METHOD 

WRONG METHODS 

If you want to change your answer you must cross out your original answer as shown. 

If you wish to return to an answer previously crossed out, ring the answer you now wish to select as shown. 

0 5 . 1 Which of the following explains the formation of a marine platform?

[1 mark]

A As land rises, gently sloping areas in front of cliffs become exposed above the sea level. These areas were once wave-cut platforms that may be hidden beneath beach deposits.

B Coastal submergence caused by sea level rise floods valleys by the coast. This leaves raised areas of land that look like tiny islands on the new coastline.

C Joints and faults are eroded by the sea creating holes and weaknesses. These eventually erode through and leave a distinctive opening throughout the cliff.

D Sea levels increase and flood valleys. The land that is hillier and more mountainous sits above the new sea level and the valley is inundated with sea water.

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0 5 . 2 Which of the following are **all** features of low energy coastlines?

[1 mark]

A They are sheltered, have deposition rates that exceed erosion rates **and** generally constructive waves. ⬭

B They are the location of sandy flat beaches, experience low rates of erosion **and** receive mainly destructive waves. ⬭

C They contain erosional landforms, have high rates of erosion **and** low rates of deposition. ⬭

D They experience wave refraction, have high rates of erosion **and** have very little coastal protection. ⬭

0 5 . 3 'A long narrow landform, with a number of recurved tips caused by a change in the dominant transport processes over time.'

The above statement is a description of which coastal landform?

[1 mark]

A Barrier island ⬭

B Compound spit ⬭

C Offshore bar ⬭

D Tombolo ⬭

0 5 . 4 Which of the following defines the concept of shoreline management in coastal environments?

[1 mark]

A A plan written to underpin the decisions and actions for a particular sediment cell. Decisions may include advancing the line or managing retreat. ⬭

B A process bringing together a range of stakeholders within a coastal town to establish unsustainable levels of tourism, economic activity and environmental protection. ⬭

C A series of calculations identifying the costs and benefits of building sea walls. This is to review whether the local council should hold the line of the current coastline. ⬭

D A vast range of natural processes working together to allow the sea to erode the shoreline. This allows low-lying land to be flooded and salt marshes to be established. ⬭

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0 5 . 5 Which of the following describes the process of attrition?

[1 mark]

A Air is forced into cracks and faults within a cliff face. This compressed air puts force on the joints when the wave retreats. ⬭

B Sea water dissolves rocks such as chalk and limestone. This removes tiny particles from rocks and cliffs. ⬭

C Small particles such as sand are dropped when the sea loses energy. This causes beaches to develop. ⬭

D The gradual wearing away of rock particles by other sediments. Particles hit other particles, making stones smaller and smoother. ⬭

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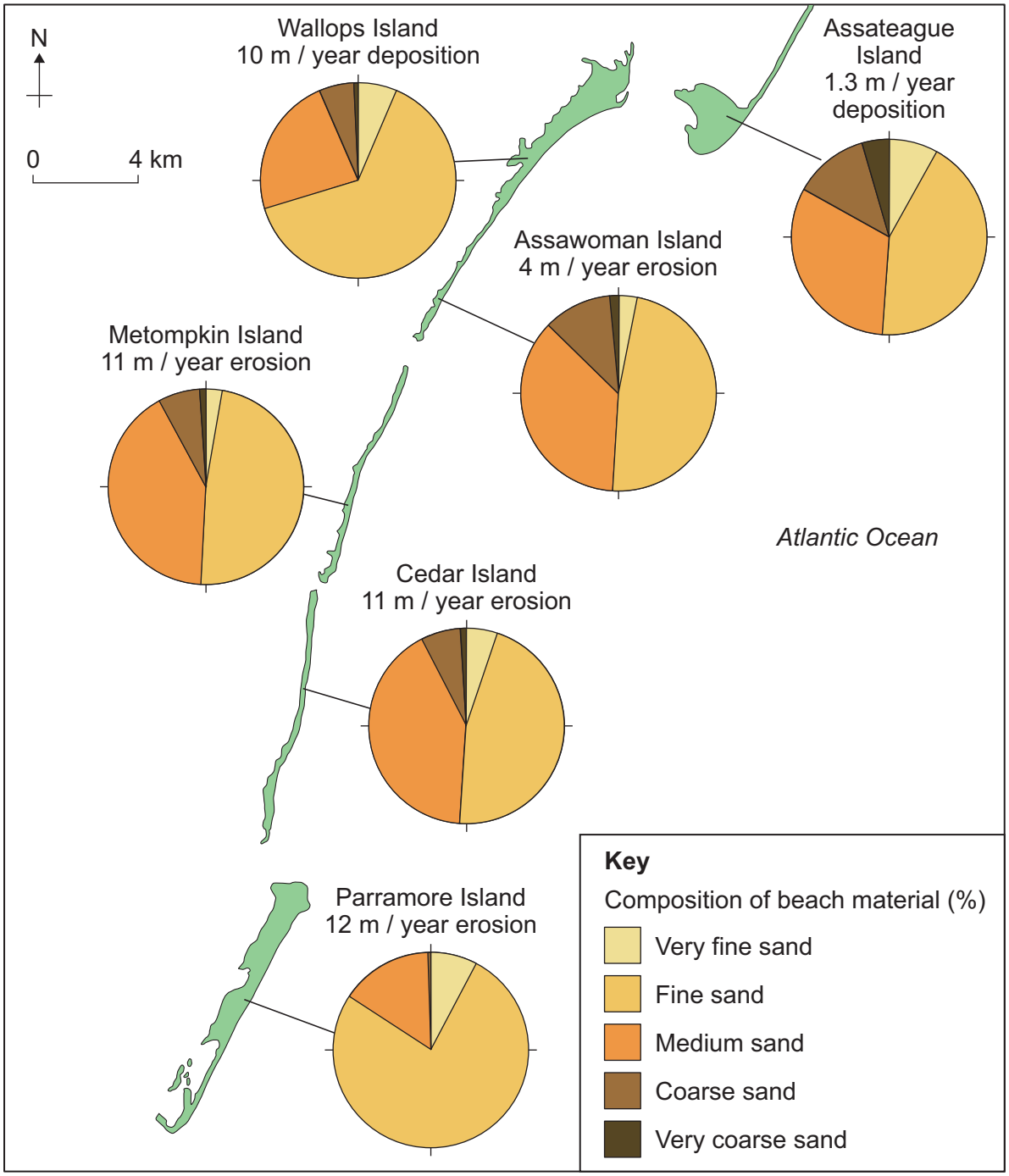
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0 6 **Figure 2** shows the composition of beach material and average rates of change for selected barrier islands along the east coast of Virginia, USA.

Figure 2



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Analyse the information shown in **Figure 2**.

[6 marks]

Extra space

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0 7 Assess the importance of weathering and erosion in the formation of wave-cut platforms.

[9 marks]

Extra space

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9

0 8 ‘Sea level change makes attempts to mitigate against coastal erosion more difficult.’

Assess the extent to which you agree with this statement.

Use **at least one** case study of a coastal landscape you have studied to support your answer.

[20 marks]

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END OF QUESTIONS

20

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