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 1A Physical Geography 1 Hot Desert 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	
3	
4	
5	
6	
7	
8	
TOTAL	

Do not write outside the box

There are no questions printed on this page

DO NOT WRITE ON THIS PAGE
ANSWER IN THE SPACES PROVIDED

Do not write outside the box

Section A – Living with Hazards

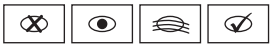
Answer **all** questions in the spaces provided.

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

Do not write outside the box

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 ⬭

Do not write outside the box

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 ⬭

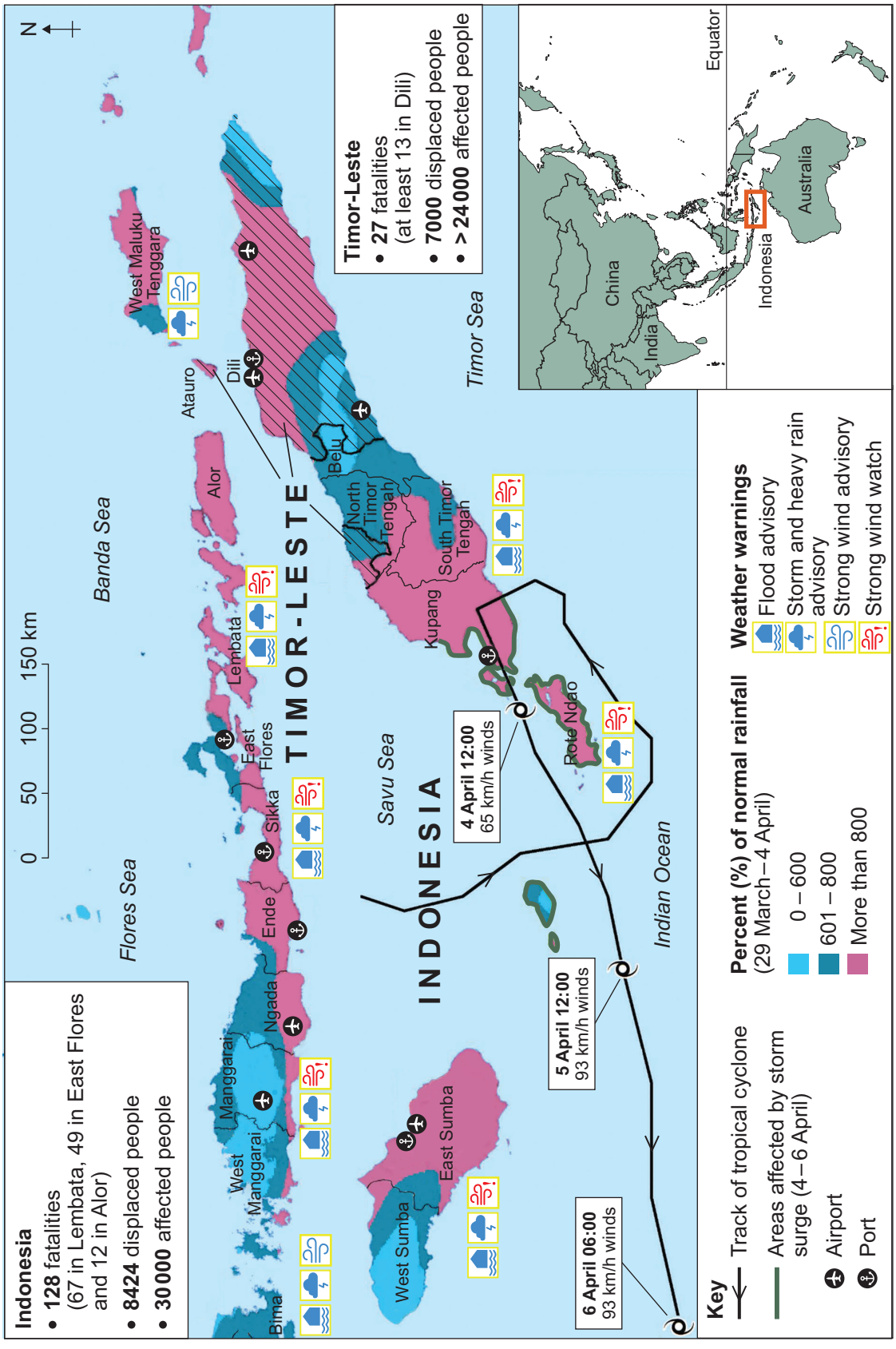
5

Turn over for the next question

Do not write outside the box

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 ▶

Do not write outside the box

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

[9 marks]

Extra space

Do not write outside the box

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]

Do not write outside the box

Extra space

Do not write outside the box

20

END OF SECTION A

Turn over for Section B

Do not write outside the box

Section B – Hot Desert Systems and Landscapes

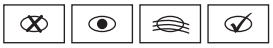
Answer **all** questions in the spaces provided.

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 are **all** ways that plants can adapt to the hot desert climate?

[1 mark]

A Ability to become dormant, storing water in fleshy stems **and** growing low to the ground ⬭

B Growing very tall with many stems, living for very short seasons **and** having wide roots under the soil surface ⬭

C Living near ephemeral streams, having small and shallow roots **and** having large green leaves that turn to the sun ⬭

D Long tap roots to access underground water stores, releasing water through large pores **and** living close to oases ⬭

0 5 . 2 Which of the following are **all** processes of transportation in hot desert environments?

[1 mark]

A Deflation, abrasion **and** suspension ⬭

B Exfoliation, flash flooding **and** thermal fracture ⬭

C Surface creep, saltation **and** suspension ⬭

D Traction, fluvial transportation **and** deposition ⬭

Do not write outside the box

0 5 . 3 ‘Rock fragments scattered across a large surface of desert, formed when wind blows away finer sand particles and leaves behind larger rocks.’

The description above refers to the appearance and formation of which desert landform?

[1 mark]

A Deflation hollow ⬭

B Desert pavement ⬭

C Inselberg ⬭

D Wadi ⬭

0 5 . 4 Which of the following explains the role of relief in causing aridity in hot deserts?

[1 mark]

A Global oceanic flows of cooler water create increased aridity due to relief. An influx of cold water from under the ocean reduces the rate of evaporation. ⬭

B Moist air is forced over hills and mountains. This creates rainfall on the windward side of slopes. The air which descends on the leeward side becomes warmer and drier. ⬭

C Sinking air in areas of high pressure causes aridity. As air sinks it warms and becomes drier. These areas experience long periods of cloudless skies and subsequent lack of rainfall. ⬭

D Warm airstreams generally come from over oceans. Coastal areas tend to have cooler conditions and are wetter than areas more inland. Inland areas are drier than coastal regions. ⬭

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

[1 mark]

A Continued heating and cooling of the outer layers of rock causes them to expand and contract and break away. ⬭

B During episodic rainfall water allows salt crystals to grow on rocks. These salt crystals cause stresses on surrounding rocks. ⬭

C Water freezes into cracks within rocks. This expands the cracks and over time weakens the rock surface. ⬭

D Wind-blown sand particles blast and abrade the sides of exposed rocks in desert environments. ⬭

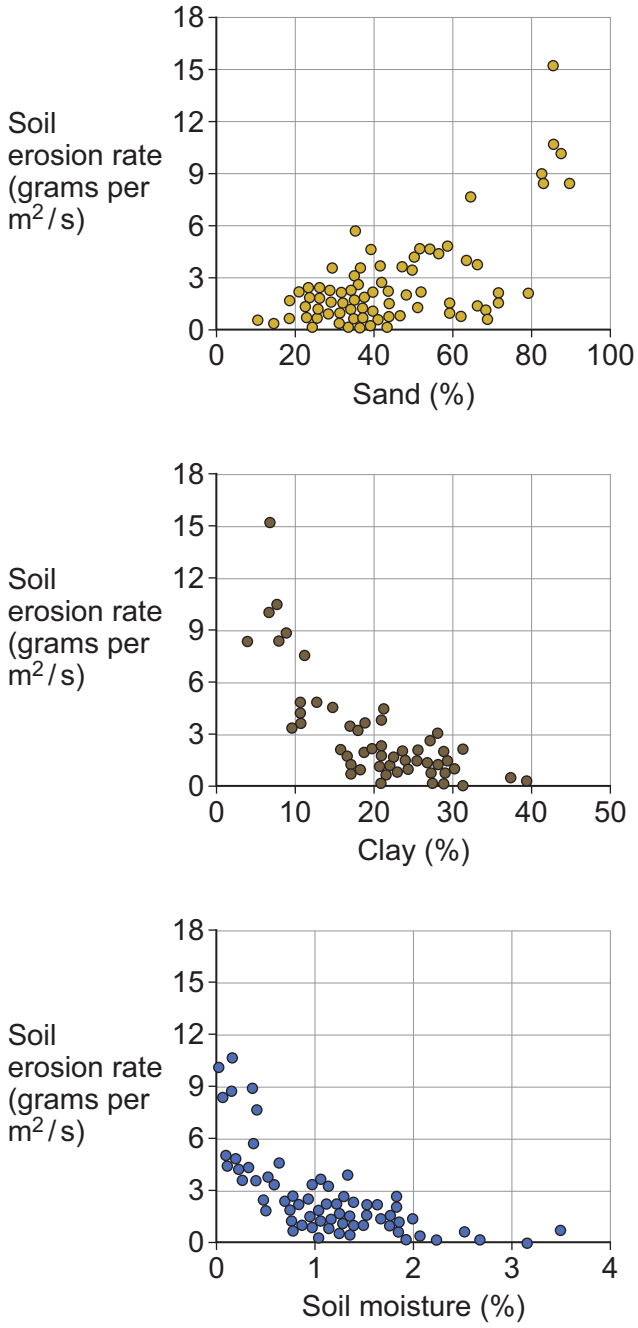
5

Do not write outside the box

0 6 **Figure 2** shows the relationship between soil characteristics and soil erosion for a range of sample sites in southern Iran.

The rate of soil erosion was measured in grams per metre^2 per second (grams per m^2/s).

Figure 2



Do not write outside the box

Analyse the different rates of soil erosion in **Figure 2**.

[6 marks]

Extra space

6

Turn over for the next question

Do not write outside the box

0 7 Assess the importance of sheet and flash flooding in the formation of wadis.

[9 marks]

Extra space

Do not write outside the box

9

0 8 ‘The human causes of desertification make attempts to mitigate against it more difficult.’

Assess the extent to which you agree with this statement.

Use **at least one** case study of a landscape impacted by desertification to support your answer.

[20 marks]

Do not write outside the box

Extra space

Do not write outside the box

END OF QUESTIONS

20

Do not write outside the box

There are no questions printed on this page

DO NOT WRITE ON THIS PAGE
ANSWER IN THE SPACES PROVIDED

Do not write outside the box

Question number	**Additional page, if required.** **Write the question numbers in the left-hand margin.**

Do not write outside the box

Question number	**Additional page, if required.** **Write the question numbers in the left-hand margin.**

Do not write outside the box

Question number	**Additional page, if required.** **Write the question numbers in the left-hand margin.**

Do not write outside the box

There are no questions printed on this page

DO NOT WRITE ON THIS PAGE
ANSWER IN THE SPACES PROVIDED

Copyright information

For confidentiality purposes, all acknowledgements of third-party copyright material are published in a separate booklet.
This booklet is published after each live examination series and is available for free download from www.oxfordaqaexams.org.uk.

Permission to reproduce all copyright material has been applied for. In some cases, efforts to contact copyright-holders may have been unsuccessful and Oxford International AQA Examinations will be happy to rectify any omissions of acknowledgements. If you have any queries please contact the Copyright Team.

Copyright © 2023 Oxford International AQA Examinations and its licensors. All rights reserved.