OXFORD

INTERNATIONAL
AQA EXAMINATIONS

Please write clearly in block capitals.

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

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Candidate signature _____

I declare this is my own work.

INTERNATIONAL AS

GEOGRAPHY

Paper 1B Physical Geography 1 Coastal Systems and Landscapes

Monday 4 January 2021 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	

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Section A – Living with Hazards

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

You must answer **all** of **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 Seafloor spreading happens:

[1 mark]

A as a result of magma plumes away from plate margins, where hot spots of magma rise up and remain stationary whilst the plate moves above the plume.

B at constructive margins, as plates are dragged apart, where some of the youngest rocks on the Earth's surface are found.

C at extremely active conservative plate margins, when friction between plates leads to stresses along the boundary.

D when a continental plate meets a continental plate at a destructive plate margin, as the plates are of similar density.

0 1 . 2 One approach to land use zoning involves having low value land use in high risk areas to reduce the vulnerability of people. This is classed as:

[1 mark]

A adaptation.

B disaster aid.

C prediction.

D prevention.

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0 1 . 3 Which of the following are **all** environmental impacts of wildfires?

[1 mark]

A Destruction of schools, loss of livestock and impact on the greenhouse effect. ⬭

B Developing strategies for preparedness, reviewing laws and emergency service stress. ⬭

C Displacement of people, disruption to power supplies and injury. ⬭

D Impact on food webs, increase of carbon dioxide and depletion of nutrient stores. ⬭

0 1 . 4 A mixture of super-heated gas, volcanic rock and ash that travels at high speed down the sides of a volcano describes:

[1 mark]

A a lava flow. ⬭

B a mudflow. ⬭

C a pyroclastic flow. ⬭

D tephra. ⬭

0 1 . 5 Liquefaction happens when:

[1 mark]

A many small aftershocks reduce the stability and strength of buildings and infrastructure, such as bridges and roads. ⬭

B ocean floor earthquakes or submarine volcanoes push water up and onto the land. ⬭

C seismic vibrations of saturated soil cause the soil to act like a liquid and deform the ground. ⬭

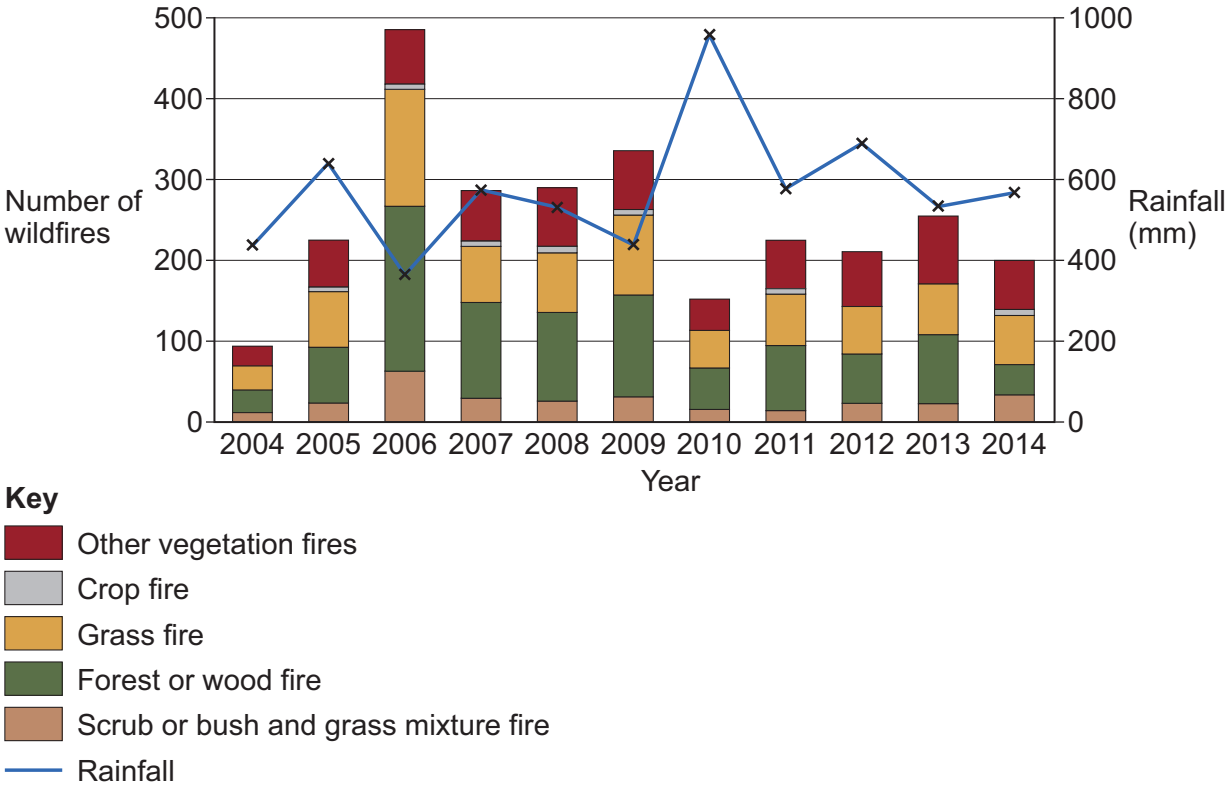
D the fastest seismic waves, called P waves, reach the surface and push the ground up. ⬭

5

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Figure 1 shows wildfires and rainfall in an area between 2004 and 2014.

Figure 1



0 2 Analyse the data shown in **Figure 1**.

[6 marks]

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Extra space

6

Turn over for the next question

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0 3 For a multi-hazardous environment that you have studied, assess the nature of the hazards and the relative risks they present.

[9 marks]

Extra space

9

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0 4 ‘The level of economic development is the most important factor in reducing the impact of, and aiding recovery from, tropical storms.’

Evaluate this statement with reference to examples you have studied.

[20 marks]

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Extra space

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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** of **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 describes mass movement?

[1 mark]

A A chemical reaction between salts and the rock type of a coastline. ⬭

B Downhill movement of material due to gravity. ⬭

C Overland flow which moves small particles into the littoral zone. ⬭

D Waves forcing air into joints and exerting pressure on the cliff. ⬭

0 5 . 2 Which coastal feature is formed by the following process?

'A cliff is undercut along the high tide line, causing the area above to collapse and leave behind a gently sloping area.'

[1 mark]

A Cave ⬭

B Coastal arch ⬭

C Dalmatian coastline ⬭

D Wave cut platform ⬭

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0 5 . 3 Which of the following **all** provide inputs of sediment into a coastal system?

[1 mark]

A Currents, the Sun and wave energy. ⬭

B Rias, mechanical weathering and tides. ⬭

C Rivers, shoreline erosion and wind. ⬭

D Sea level change, transportation and human activity. ⬭

0 5 . 4 Which method of coastal intervention for flooding and erosion risk is described by the following characteristics?

- Works with the coastal processes occurring within that area.
- Uses natural materials.
- Maintains a natural coastal environment.

[1 mark]

A Hard engineering ⬭

B Integrated coastal zone management ⬭

C Shoreline management plans ⬭

D Soft engineering ⬭

0 5 . 5 Which sequence shows the correct formation of a saltmarsh?

[1 mark]

A Deposition of particles and mud allows the development of salt tolerant plants; sediment accumulates around the plants; more plants colonise and surface becomes drier. ⬭

B Deposition of river sediment creates damp mud pools where vegetation cannot develop; this leads to marshy areas on the coast. ⬭

C Erosion of sediments from river estuary; this leads to sediments being washed away in littoral drift; areas of shallow water create conditions for deposition away from the shoreline. ⬭

D Large quantities of sand are washed onto the beach by the waves and wind; this sand accumulates and can become vegetated by salt resistant plants. ⬭

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Figures 2a and 2b

Figure 2a shows a map of the extent of 1.5 m sea level rise around Jacksonville in Florida, USA.

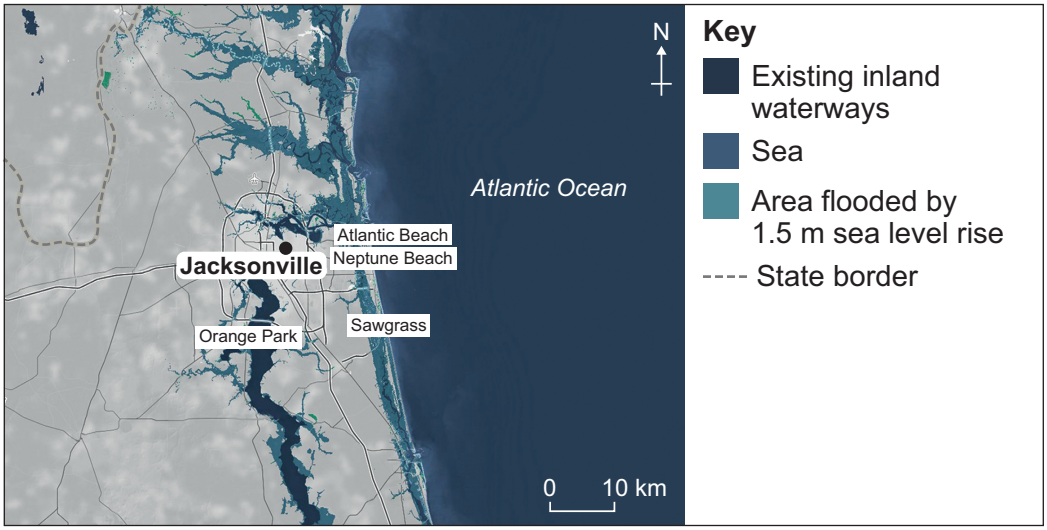
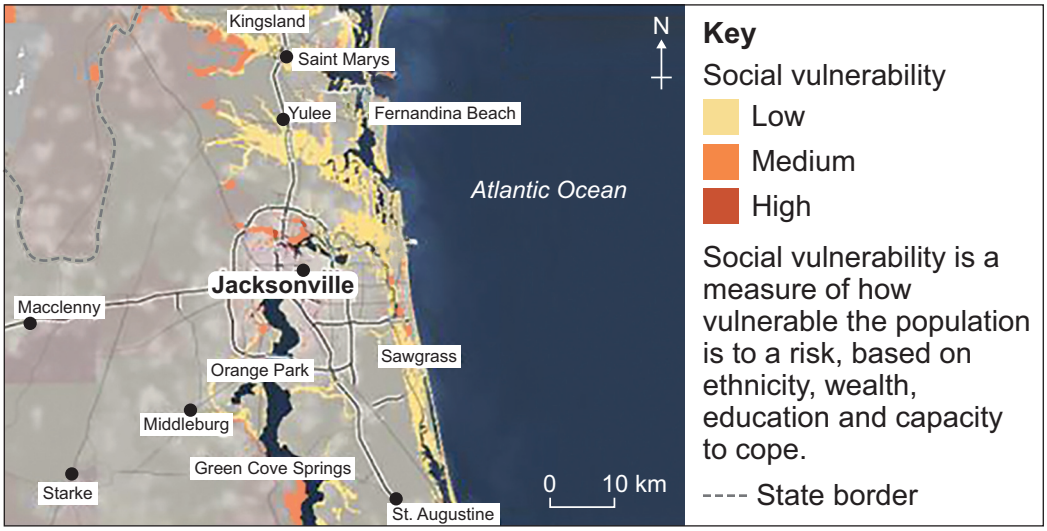


Figure 2b shows a map of the social vulnerability of people to a risk around Jacksonville in Florida, USA.



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0 6 Analyse the relationship between a sea level rise of 1.5 m shown in **Figure 2a** and the social vulnerability shown in **Figure 2b**.

[6 marks]

Extra space

6

Turn over for the next question

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0 7 Examine the role of high energy coastal environments in the formation of landforms of coastal erosion.

[9 marks]

Extra space

9

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0 8 Assess the importance of sediment cells in the creation of landforms of coastal deposition.

[20 marks]

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Extra space

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END OF QUESTIONS

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ANSWER IN THE SPACES PROVIDED

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