



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
International General Certificate of Secondary Education

CANDIDATE
NAME

CENTRE
NUMBER

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ENVIRONMENTAL MANAGEMENT

0680/11

Paper 1

October/November 2013

1 hour 30 minutes

Candidates answer on the Question Paper.

Additional Materials: Ruler

READ THESE INSTRUCTIONS FIRST

Write your Centre number, candidate number and name on all the work you hand in.

Write in dark blue or black pen.

You may use a soft pencil for any diagrams, graphs or rough working.

Do not use staples, paper clips, highlighters, glue or correction fluid.

DO NOT WRITE IN ANY BARCODES.

Answer **all** questions.

Electronic calculators may be used.

You may lose marks if you do not show your working or if you do not use appropriate units.

At the end of the examination, fasten all your work securely together.

The number of marks is given in brackets [] at the end of each question or part question.

| For Examiner's Use | |
|--------------------|--|
| 1 | |
| 2 | |
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| Total | |

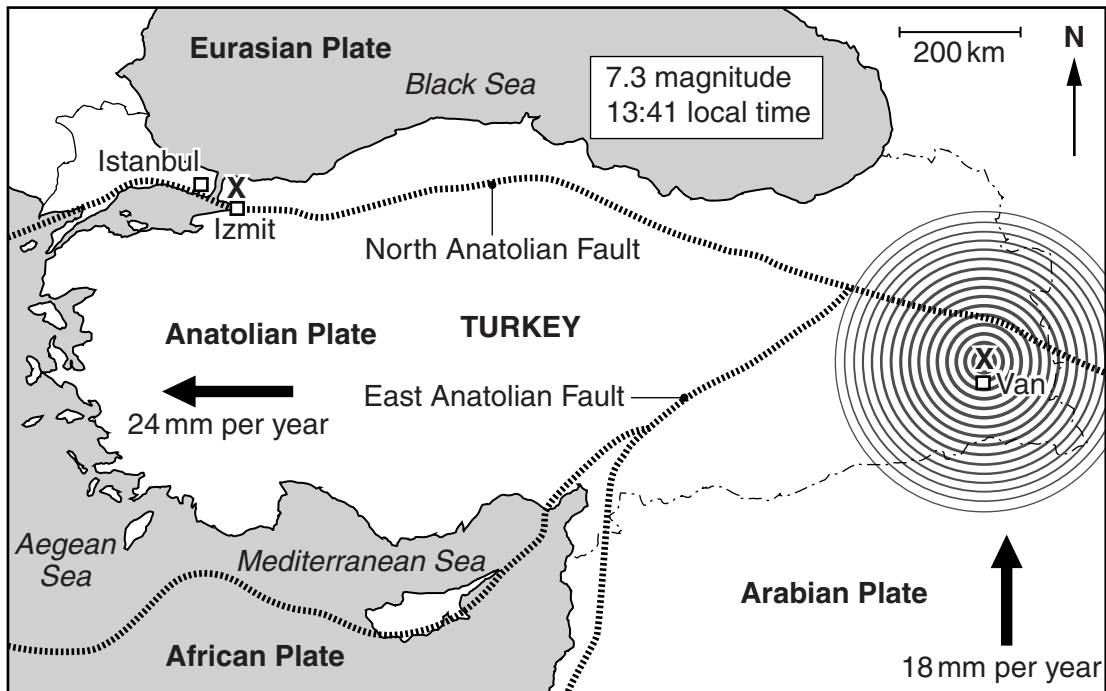
This document consists of **15** printed pages and **1** blank page.



1 Read the following newspaper report of 24th October in 2011:

“An earthquake of 7.3 magnitude shook the city of Van in eastern Turkey at 13:41 yesterday. The city has a population of about 500 000. Up to 1000 are feared dead under collapsed buildings.”

“Everyone remembers the earthquake that struck the city of Izmit with a magnitude of 7.6 at 03:00 on the morning of 17th August 1999. In this 17 000 people died, out of a population of 300 000.”



Key

plate movements relative to Eurasian Plate

plate boundary

sea

land border of Turkey

(a) What name is given to the locations marked **X** on the map?

..... [1]

- (b) (i) The Van earthquake was caused by convergent plate movement, the Izmit one by conservative movement. Describe the movement of the plates at these boundaries using names from the map and your own knowledge.

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- (ii) The official death toll for the Van earthquake was 600. How many times bigger was the death toll at Izmit compared to that of Van?

Space for working.

..... times [1]

- (iii) Suggest reasons why there was such a big difference in the death toll between these two earthquakes.

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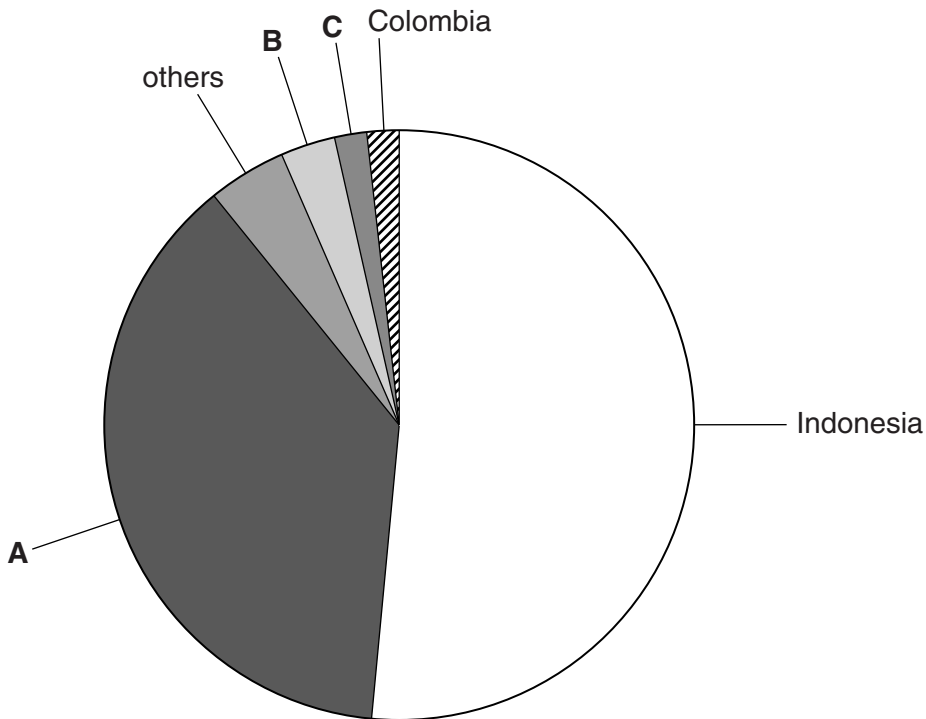
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[Total: 10]

2 The table shows the production of palm oil, by country, in 2011.

| country | production/ millions tonnes | % world total |
|-----------|-----------------------------|---------------|
| Colombia | 0.9 | 1.8 |
| Indonesia | 25.4 | 51.4 |
| Malaysia | 18.7 | 37.8 |
| Nigeria | 0.9 | 1.8 |
| Thailand | 1.5 | 3.0 |
| others | 2.0 | 4.2 |
| total | 49.4 | 100 |

(a) (i) Complete the pie graph by adding the country names.

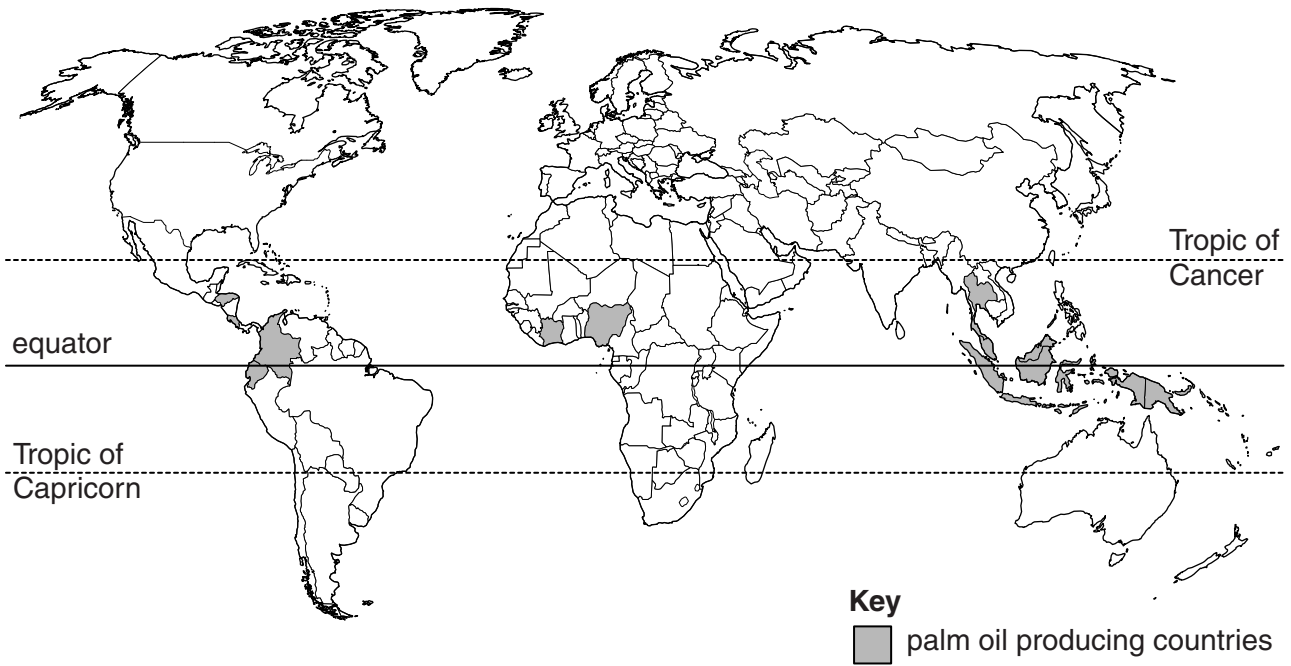


- A**
- B**
- C**

[1]

The map shows the location of the major palm oil producing countries.

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(ii) Oil palms can only be grown in one climate type. Name the climate type and give **two** of its features.

climate type

features

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..... [3]

(b) (i) Here are two statements about palm oil:

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The cost to the environment and the global climate of growing oil palms is great. Forests in South East Asia are being cleared to provide land for oil palm plantations.

Oil palms are very efficient oil producers, because each fruit contains about 50% oil. The oil can be used in foods and as a substitute for crude oil/petroleum. Palm oil and palm kernel oil are entirely GM free.

Describe and explain **two** advantages and disadvantages of growing and using palm oil.

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(ii) One species threatened by the spread of oil palm plantations is the orangutan in Malaysia. Suggest how this animal might be conserved.

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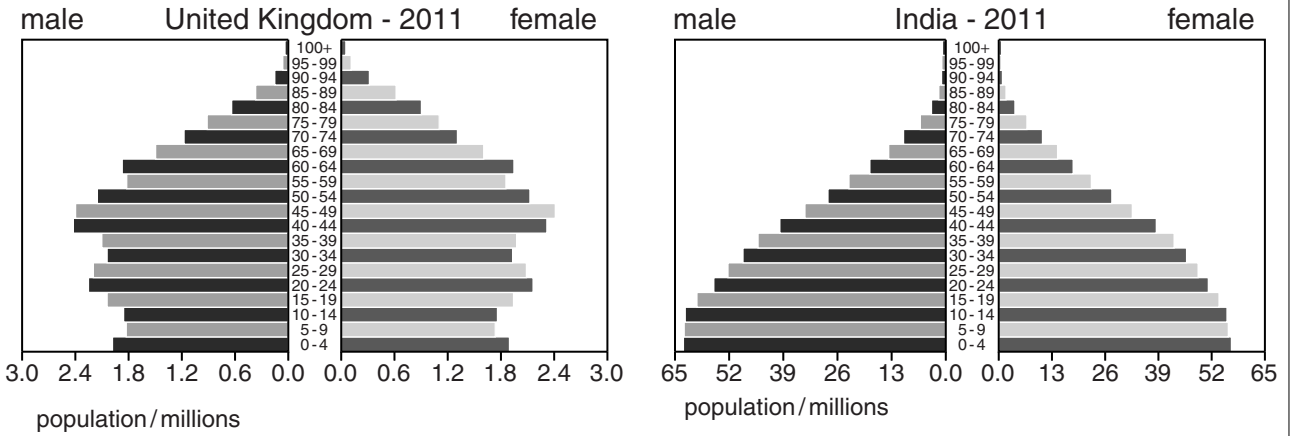
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[Total: 10]

3 Look at the diagrams showing population pyramids for the United Kingdom and India.



(a) (i) Describe the differences shown in the population and age structures between the two countries.

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(ii) Describe the different problems which result from population structures like those shown for the United Kingdom and India.

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(b) How can national policies help to solve population problems?

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[Total: 10]

4 Soil is formed from a mixture of materials including minerals, air and water.

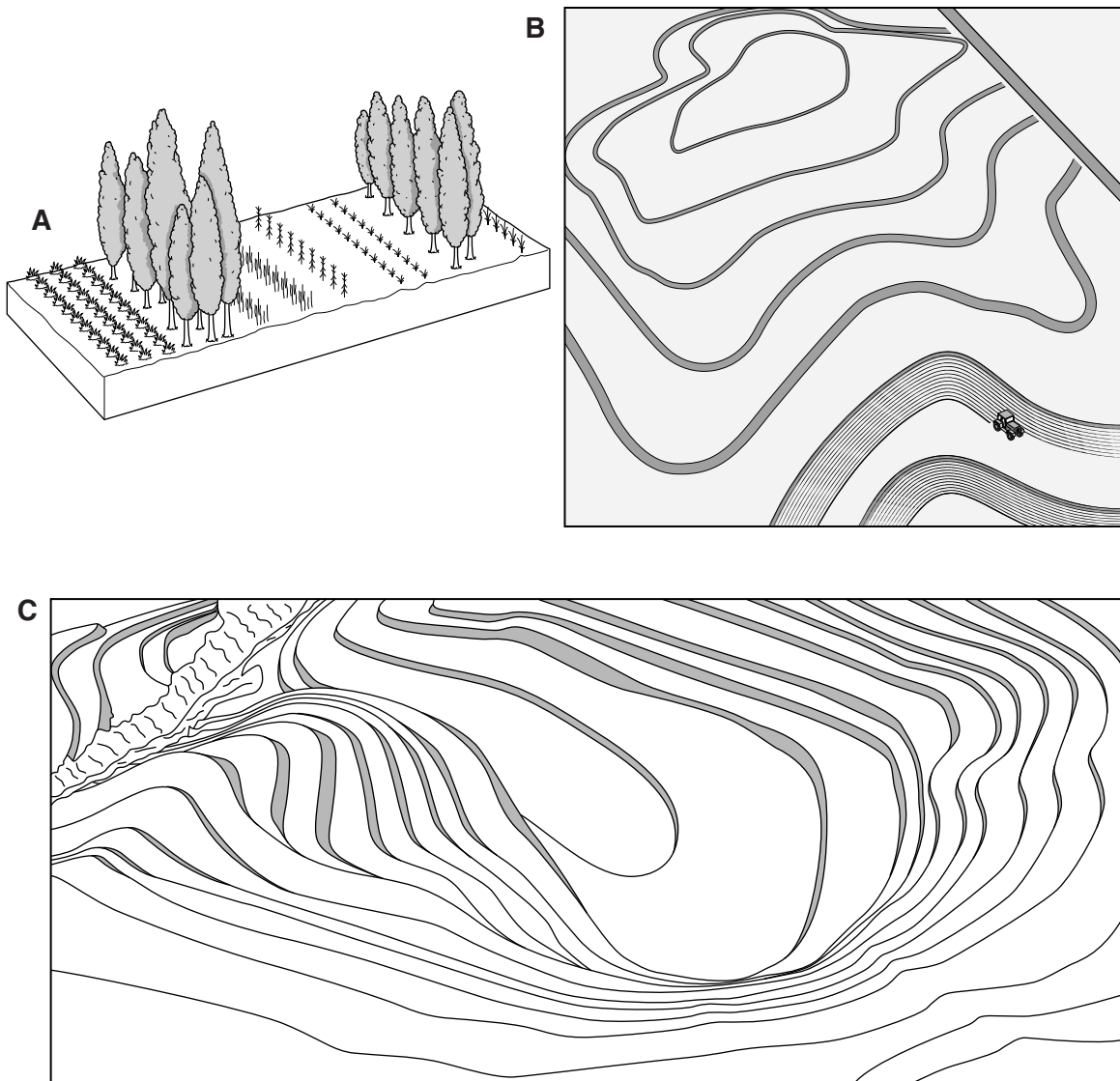
(a) (i) Describe and explain the formation of the mineral content of soils.

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..... [3]

(ii) Name **one** other material found in soils and describe how it is formed.

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(b) (i) The sketches show three methods of soil conservation, **A**, **B** and **C**.



Name the methods.

A

B

C

[2]

(ii) Choose **one** of the methods and explain how it helps to conserve the soil.

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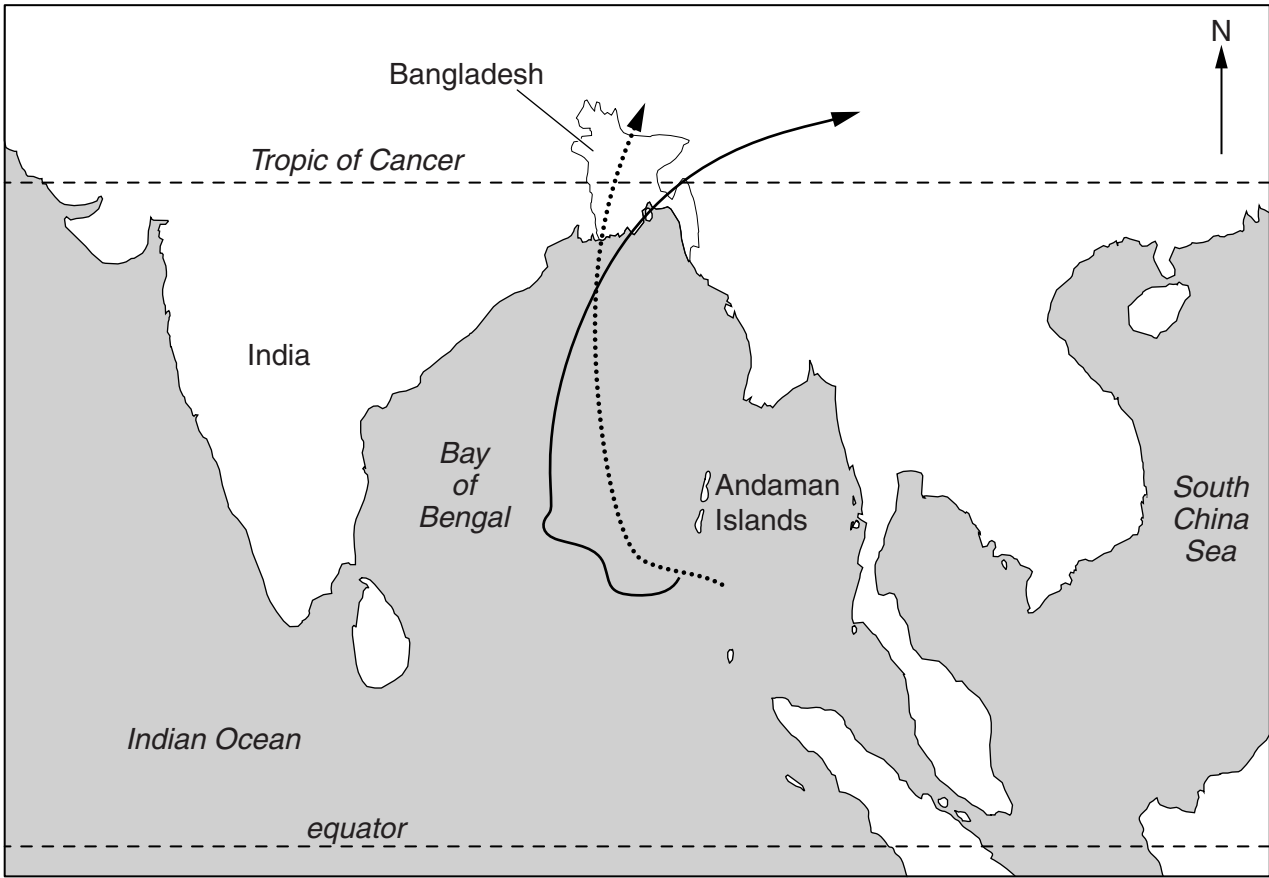
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[2]

[Total: 10]

5 The map shows the tracks of two cyclones, one that hit Bangladesh in 1991 and another which hit in 2007.

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Key

- ▶ 1991
-▶ 2007

(a) (i) What is similar and what is different about the tracks of the two cyclones?

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..... [3]

(ii) Cyclones cause flooding in Bangladesh.

Why are floods so extensive in this low-lying coastal region?

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(b) (i) The 1991 cyclone is estimated to have killed over 130 000 people, the one in 2007 no more than 4000. Suggest reasons for the difference.

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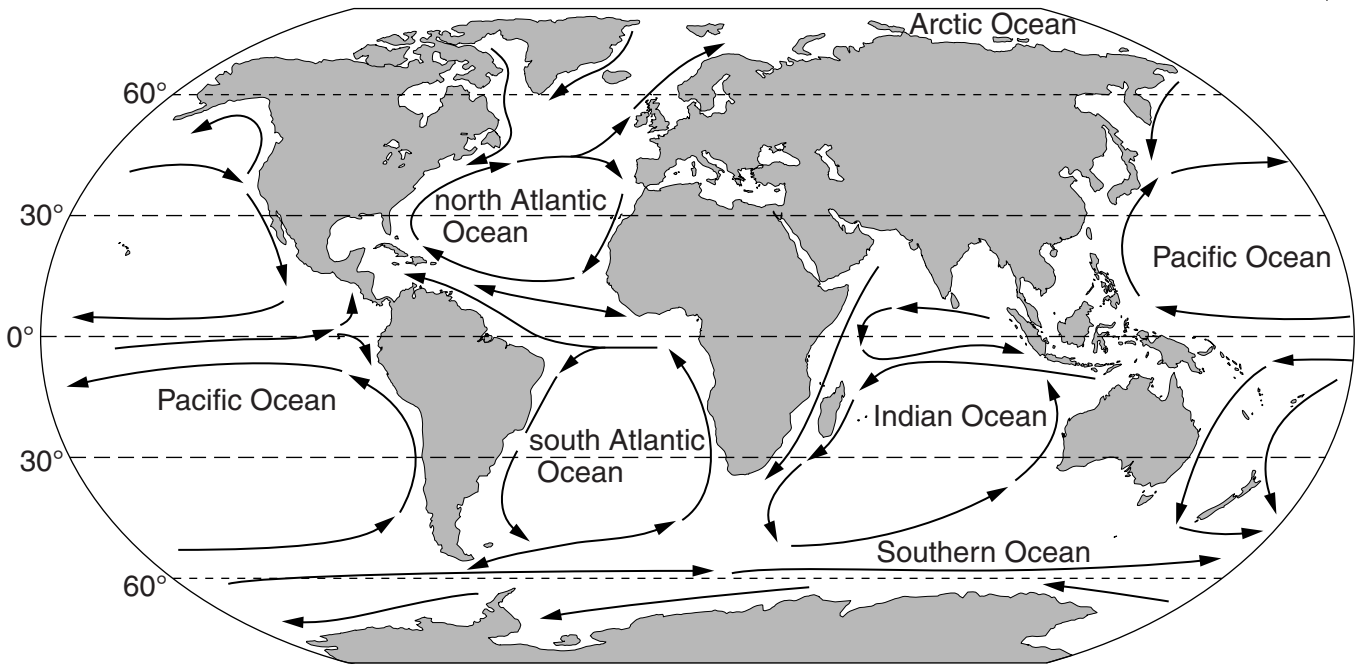
(ii) Suggest reasons why people continue to live in such areas, despite the high risk of cyclones and floods.

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..... [2]

[Total: 10]

6 The map shows the major ocean currents of the world.

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(a) (i) On the map label a warm current with the letter **P** and a cold current with the letter **Q**. Write the names of the **two** currents in the spaces below.

P

Q

[2]

(ii) Mark on the map, with a letter **R** and a letter **S**, the location of **two** major fishing areas. State the location of each one in the spaces below.

R

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S

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[2]

(b) (i) Even where there are major fisheries, fish stocks can become limited due to overfishing. Explain how changed fishing methods might lead to overfishing.

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(ii) What strategies are there for the sustainable harvesting of ocean fisheries?

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[Total: 10]

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