

Candidate Name _____

Centre Number	Candidate Number

**International General Certificate of Secondary Education
CAMBRIDGE INTERNATIONAL EXAMINATIONS**

**NATURAL ECONOMY
PAPER 1**

0670/1

MAY/JUNE SESSION 2002

1 hour 45 minutes

Candidates answer on the question paper.
Additional materials:
Ruler (cm/mm)

TIME 1 hour 45 minutes

INSTRUCTIONS TO CANDIDATES

Write your name, Centre number and candidate number in the spaces at the top of this page.

Answer **all** questions.

Write your answers in the spaces provided on the question paper.

INFORMATION FOR CANDIDATES

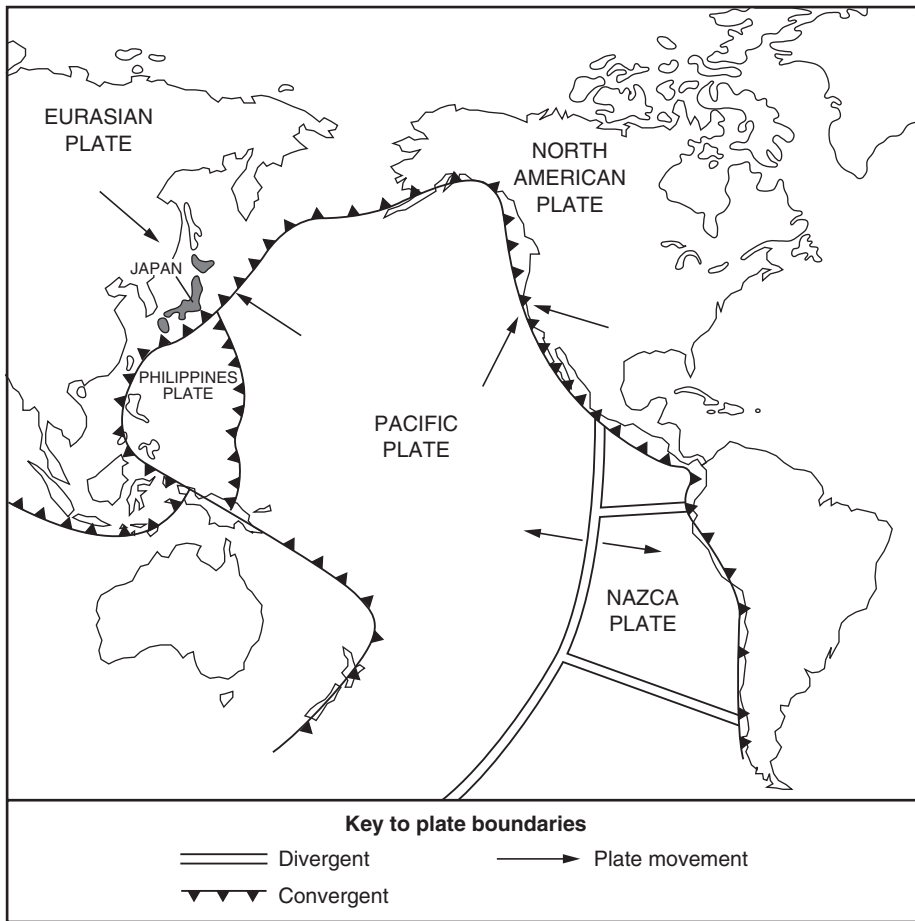
The number of marks is given in brackets [] at the end of each question or part question.

FOR EXAMINER'S USE	
1	
2	
3	
4	
TOTAL	

This question paper consists of 10 printed pages and 2 blank pages.



1 The map below shows plate boundaries around the Pacific Ocean.



1 (a) (i) Name the type of plate boundary which lies;
 between the Nazca Plate and the Pacific Plate
 between the Pacific Plate and the North American Plate[2]

(ii) Use the map to explain why Japan experiences many earthquakes.

[2]

(b) (i) Explain why earthquakes and volcanoes usually occur in the same parts of the world.

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.....[3]

(ii) Describe **three** effects of a volcanic eruption on the people in the area surrounding it.

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.....[3]

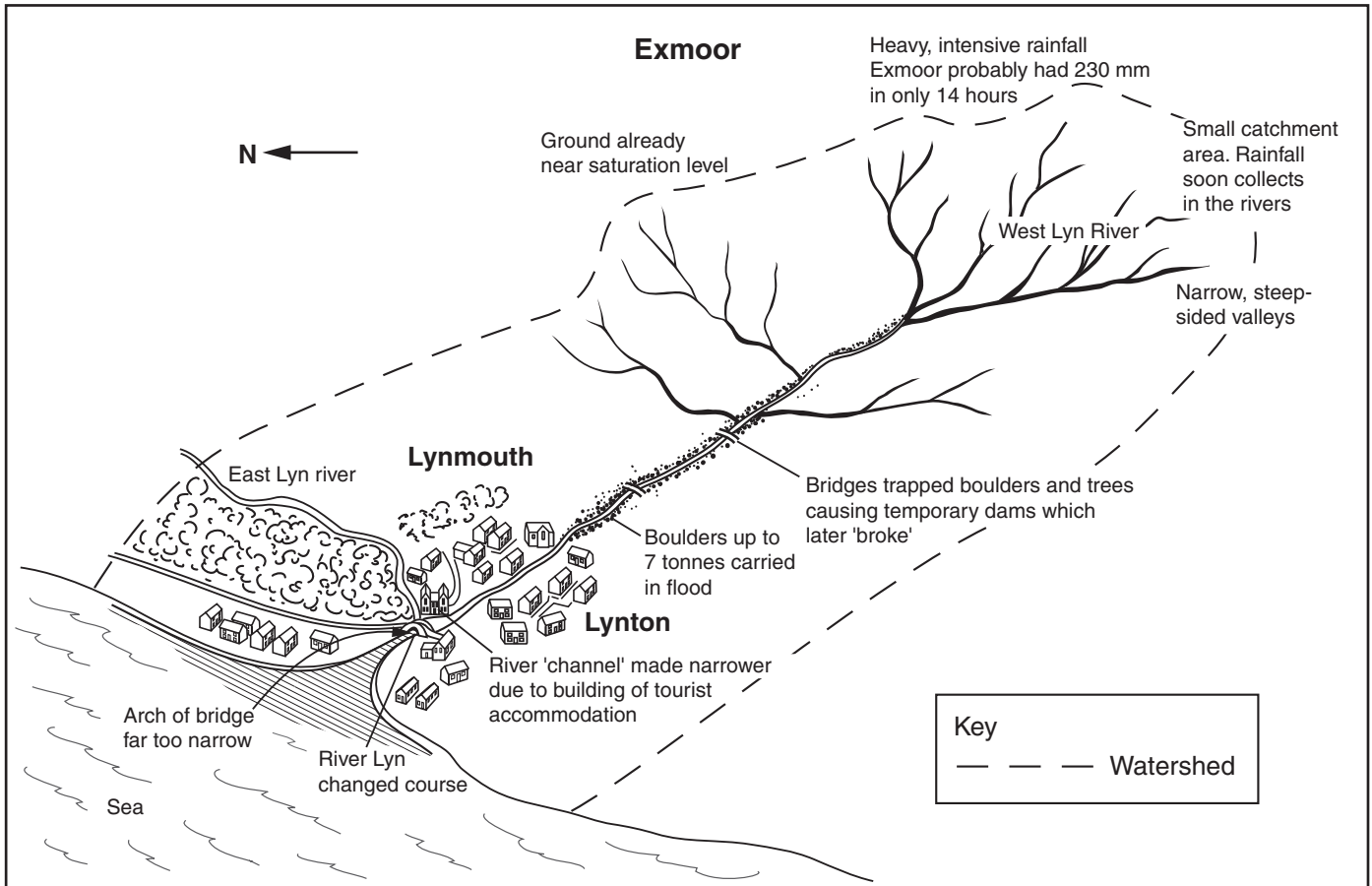
(c) Give **two** reasons why the effects of an earthquake can be more severe in a developing country than in a developed country.

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.....[2]

(d) Why do many people continue to live in areas at risk from earthquakes and volcanic activity?

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.....[3]

[Total : 15]



(a) The diagram above shows the causes of a flood which took place in England.

(i) State **two** natural causes of the flood.

.....
.....[2]

(ii) State **two** ways in which human activities made the flood worse.

.....
.....[2]

(b) (i) Explain how building a dam across a river may reduce the risk of flooding downstream.

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.....[2]

(ii) State **three** other uses of dams across rivers.

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.....[3]

(iii) Why may environmentalists object to the building of large dams?

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.....[3]

(c) What advice would you give to people to help ensure that the water they drink is clean and safe to use?

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.....[3]

[Total : 15]

3 (a) (i) What is meant by the term 'greenhouse effect'?

.....

.....

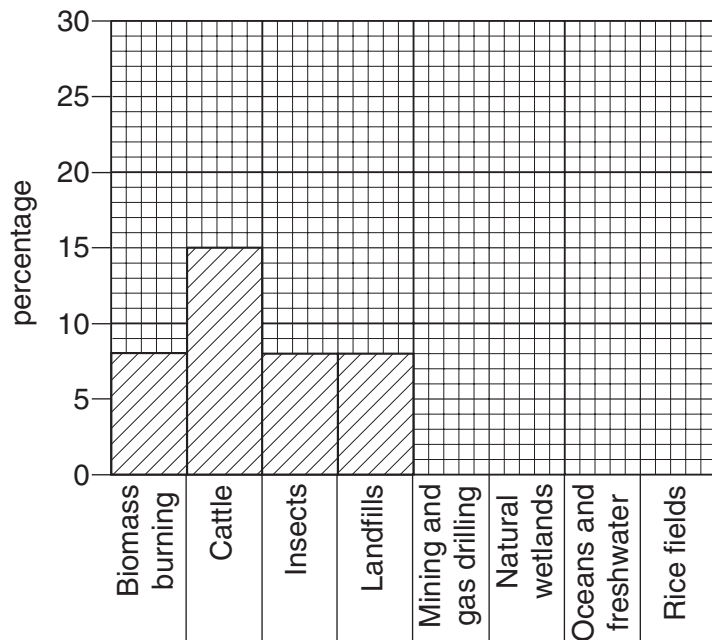
.....

.....[2]

(ii) Methane is one of the main greenhouse gases. The table below shows the main sources of methane in the atmosphere. Complete the bar chart. [2]

SOURCES OF ATMOSPHERIC METHANE

Biomass burning	8%
Cattle	15%
Insects	8%
Landfill (domestic waste tips)	8%
Mining and gas drilling	15%
Natural wetlands	22%
Oceans and freshwater	3%
Rice fields	21%



(iii) Name the largest natural source of atmospheric methane.

.....[1]

(iv) Which human activity produces the most atmospheric methane?

.....[1]

(b) (i) Name **one** greenhouse gas other than methane and explain how it may be released into the atmosphere.

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.....[3]

(ii) Suggest long-term consequences of the build up of greenhouse gases in the atmosphere.

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.....[3]

(c) What strategies would you consider best for reducing the build up of greenhouse gases in the atmosphere?

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.....[3]

[Total : 15]

4 (a) (i) What is meant by the term 'soil erosion'?

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.....[2]

Nepal is a country about the same size as England. It lies between Tibet (China) and India. Nepal is one of the most mountainous countries in the world. The climate is very wet in summer and very dry in winter. It has a population of about 20 million, which is increasing rapidly. Most of the population are subsistence farmers and farming takes place along steep-sided mountain valleys. In the last ten years, one third of Nepal's forests have been lost. Nepal is one of the world's poorest countries.

(ii) Choose **four** factors from the paragraph above, and explain how they might increase the risk of soil erosion.

factor 1

explanation

.....

.....

factor 2

explanation

.....

.....

factor 3

explanation

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.....

factor 4

explanation

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.....[8]

(b) Nepal has many fast-flowing rivers which flow into India and Bangladesh. Suggest how soil erosion in Nepal might cause problems for India and Bangladesh.

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.....
.....[2]

(c) What strategies would you consider best to reduce soil erosion?

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.....
.....
.....
.....
.....[3]

[Total : 15]

TOTAL FOR PAPER: 60

Copyright Acknowledgements:

Question 2. Diagram of Lynmouth Flood by David Waugh. Published by Nelsons.

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