

#### **CAMBRIDGE INTERNATIONAL EXAMINATIONS**

International General Certificate of Secondary Education

## MARK SCHEME for the June 2002 question papers

# 0670 NATURAL ECONOMY

0670/1 Paper 1 maximum mark 60

**0670/2** Paper 2, maximum mark 80

0670/4 Paper 4 (Alternative to Coursework), maximum mark 30

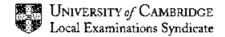
These mark schemes are published as an aid to teachers and students, to indicate the requirements of the examination. They show the basis on which Examiners were initially instructed to award marks. They do not indicate the details of the discussions that took place at an Examiners' meeting before marking began. Any substantial changes to the mark scheme that arose from these discussions will be recorded in the published *Report on the Examination*.

All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes must be read in conjunction with the question papers and the Report on the Examinetion.

CIE will not enter into discussions or correspondence in connection with these mark schemes.

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### **NATURAL ECONOMY (0670)**

### PAPER 1

1	(a)	(i)	Nazca-Pacific = diver			
			Pacific/N American =	convergent	2 x 1	= 2
		(ii)	Because Japan is clo Plate boundaries nar	ose to plate boundaries med/specified	(1 mark) (1 mark)	= 2
	(b)	(i)	Because both are connected with plate movement and ther place largely at plate boundaries; where the crust may move (Earthquake) or where there's a weakness which allows come to the surface.			
		(ii)	There are many poss	gs like		
				death homes destroyed farmlands destroyed et	tc	= 3
	(c)		Expect things like;	buildings not so well bu early warning systems		in place

any two points  $2 \times 1 = 2$ 

poor infrastructure making evacuation/aid more

(d) Lots of possible reasons;

Fatalism Lack of choice Incidents very rare Fertile soils Geothermal energy

Tourism etc

difficult

Any of these may be developed to a maximum of three marks; or accept three simply stated points.

2	(a)	(i)	The heavy intensive ra The saturated ground	in <b>fall</b>	(1 mark) (1 mark)	= 2	
		(ii)	Bridges built River channel made na	arrower	(1 mark) (1 mark)	= 2	
	(b)	(i)	Building a dam enables the flow of water to be controlled, so water be kept back behind the dam when river levels rise.				
		(ii)	Expect things like;	HEP Improved navigation Improved water supplies for irrigation industriction domesion (Max 2)		y tic use	
					3 x 1	= 3	
		(iii)	Many possibilities here, so accept a list of points or one or two developed points. Things like;				
				loss of farmland/homes visual impact of dam life cycles of fish disrupte	d etc	= 3	
	(c)	Expe	ect things like;				
				Boil it Take it from a tap Take it from a bottle Avoid dangerous water s	ources		

Allow a list of points, or one or two points developed.

**∓ 3** 

3 (a) (i) The build-up of certain gases in the atmosphere (1 mark), which trapmore of the sun's energy (1 mark), causing global warming (1 mark).

Credit any 2 points;  $2 \times 1 = 2$ 

(ii) 4 bars correctly drawn = 2 2-3 bars correctly drawn = 1

0-1 bars correctly drawn = 0

= 2

(iii) Natural wetlands

= 1

(iv) Rice fields

**=** 1

- (b) (i) Probably carbon dioxide (1 mark). But there are many others like CFCs, nitrous oxides, surface ozone etc. Two marks for explanation e.g. Carbon dioxide is released into the atmosphere from the combustion of fossil fuels in industry or car exhausts. Human exhalation.
  - (ii) Global warming, climatic change (some places wetter, some drier, rise in sea levels; flooding more frequent in low lying coastal areas etc)

= 3

- (c) Allow a variety of ideas or one well-developed theme for 3 marks;
  - e.g. 'I would suggest that governments should attempt to reduce petrol consumption (1 mark) by heavier taxation of petrol (1 mark) which would make lower petrol consumption vehicles more desirable (1 mark).'

- 4 (a) (i) The removal of soil (1 mark) by wind/water (1 mark)

  2 x 1 = 2
  - (ii) Allow; Population increasingly rapidly (1 mark) therefore more land cleared and greater chance of soil erosion.
     Mountainous country (1 mark). Therefore steep slopes which make it easier for soil to be washed away (1 mark).
     Farming along steep sided valleys (1 mark) because land will be cleared on steep slopes; soil easily washed away (1 mark).
     Loss of forest (1 mark) so need roots to bind soil together (1 mark).
     Climate v wet in summer (1 mark) therefore heavy rain to wash the soil away (1 mark).
     4 x 2
     ≈ 8
  - (b) Soil that is washed into rivers in Nepal will be carried down into India/Bangladesh, where it may reduce water quality or increase the risk of flooding. Credit any two points. 2 x 1 = 2
  - (c) Credit any points concerning good land management practices or the prevention of bad ones. Any one strategy could gain the three marks if well developed.

    3 x 1 3