

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 Examination*.

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

CIE is publishing the mark schemes for the June 2002 question papers for most IGCSE and GCE Advanced Level syllabuses.

- 2 (a) (i) The heavy intensive rainfall (1 mark)
The saturated ground (1 mark) = 2
- (ii) Bridges built (1 mark)
River channel made narrower (1 mark) = 2
- (b) (i) Building a dam enables the flow of water to be controlled, so water can be kept back behind the dam when river levels rise. = 2
- (ii) Expect things like; HEP
Improved navigation
Improved water supplies for irrigation
industry
domestic use
(Max 2)
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 disrupted etc = 3
- (c) Expect things like;
Boil it
Take it from a tap
Take it from a bottle
Avoid dangerous water sources
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 trap more of the sun's energy (1 mark), causing global warming (1 mark).
- Credit any 2 points; 2 x 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. = 3
- (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 increasing 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