

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

GCE O Level

## MARK SCHEME for the June 2005 question paper

### 5014 ENVIRONMENTAL MANAGEMENT

5014

Paper 2 (Alternative to Coursework), maximum mark 60

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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.

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June 2005

GCE O Level

MARK SCHEME

MAXIMUM MARK: 60

SYLLABUS/COMPONENT: 5014/02

ENVIRONMENTAL MANAGEMENT  
(Alternative to Coursework)



UNIVERSITY of CAMBRIDGE  
International Examinations

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- 1 (a)**
- (i) May; [1]
- (ii) April December;  
July September; [2]
- (iii) June; [1]
- (b)**
- (i) Farmers - ref to crop damage/soil erosion/best planting time/e.g. AVP; [1]
- (ii) In city - flooding/damage to stored foods/e.g., AVP such as medical precautions; [2]
- (c)**
- (i) 10; well spaced/all along road; [2]
- (ii) Easy to empty/good access/eq; [1]
- (iii) Water runs through settlement/flooding; pathogens/eq from waste bin; spread of pathogens; from sewage; correct ref to malaria; AVP; [2]
- (d)**
- (i) SO<sub>2</sub>; coal/from factories;  
NO<sub>x</sub>; car exhaust;  
CO; open fires/incomplete combustion/cars;  
[R a source if not related to a correct gas. R CO<sub>2</sub>]. [4]
- (ii) Girls stay in cooking/eq; [1]
- (iii) Cleaner fuel in city/in cars/use biogas/move factories (to edge of city);  
R moving people. [1]
- (e)**
- (i) Open fires; overcrowding; shelters made from flammable material;  
AVP; [2]
- (ii) Sewage removal; electricity; rubbish removal; schools;  
clinics/hospitals; AVP; [2]
- (iii) Drinking water contaminated; a valid reason; AVP; [2]
- 2 (a)**
- (i) Cash/crop/eq; [1]
- (ii) Sprayed less often; [1]
- (iii) Three good features such as colour/pest resistant/easy to pick/fast growth/AVP/AVP; (Note all answers must be relevant to farmers or their family) then each point qualified;;; [A cost of seed if qualified]. [4]
- (b)**
- (i) So soil/climate/planting density/fertiliser/AVP - the same;; [2]

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- (ii) Ref to a random method/or described;  
A throw quadrat. [1]
- (c) (i) Ref to gloves/masks/washing hands/do not eat/protective clothing. [1]
- (ii) 230 46; [1]
- (iii)  $46/230 \times 100 = 20\%$ ; [Allow consequential error from (ii)];. [2]
- (iv) All plots correct;; one mistake; [2]
- (v) Infested bolls increase as total bolls increase; [1]
- (d) Three good questions about growing cotton from the farmers perspective;;; layout; [4]
- 3 (a) (i) To reduce soil erosion/reduce floods; maintain/improve soil fertility; more favourable climate; forest products in the future; AVP;; (AVP's such as refs living standard and employment). [3]
- (ii) Medicinal plants; disturb/hunt wildlife/macques; AVP; Valid explanation (such as altering food chain); [2]
- (b) (i) No value - not good food; cannot sell skins; too difficult to find; AVP;; Value - may allow ecotourism; religious view; AVP;; [3]
- (c) Ideas such as:  
Relating to humans
- (i) Dust blows into village; causes disease/named disease/condition; water poisoned;
- Relating to environment
- (ii) Explosions disturb wildlife; water courses poisoned; AVP;; [4]
- (d) Five valid points such as:
- control entry to shola;
  - start limited ecotourism;
  - mine magnesium away from water; and village/shoal;
  - crop rotation;
  - high value cash crop;
  - high protein animal;
  - intercropping in managed forest;
  - maintain supply of wood/eq;
  - family planning;
  - AVP;;
- [5]