

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.

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

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June 2005

GCE O Level

MARK SCHEME

MAXIMUM MARK: 60

SYLLABUS/COMPONENT: 5014/02

ENVIRONMENTAL MANAGEMENT
(Alternative to Coursework)



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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) SO₂; coal/from factories;
NO_x; car exhaust;
CO; open fires/incomplete combustion/cars;
[R a source if not related to a correct gas. R CO₂]. [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]