

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)



Page 1	Mark Scheme	Syllabus	Paper
	ENVIRONMENTAL MANAGEMENT – June 2005	5014	2

- 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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	ENVIRONMENTAL MANAGEMENT – June 2005	5014	2

- (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]