CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the October/November 2

0680 ENVIRONMENTAL MANAGEMENT

0680/43 Paper 4 (Alternative to Coursework), maximum raw mark 60

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the October/November 2013 series for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level components and some Ordinary Level components.

1 (a) (i) anchovy is a major part of the world catch/eq; there w anchovy/eq; the fish should always be available/eq; co on infrastructure/eq;

(ii) 13.5–14.0 and 1.5–1.6; 88.8–89.3 (%); allow error carrie

(iii) a suitable summary line; four events marked on line;

(iv) the fish catch drops after each event; figures to support t

(b) (i) to stop further expansion of fishing; prevent depletion of fish stocks; be able to control fishing/prevent overfishing; **[1]**

(ii) have to buy old boat and scrap it/take it out of anchovy fishing/eq; **[1]**

(iii) net size: stops catching too many/young fish before they can breed/eq;
length of fish: helps maintain breeding stock/eq;
quota: only a sustainable/eq portion of fish taken/eq;
fishing days: helps prevent illegal fishing/enforcing quota system/prevent overfishing/ref to mating season/eq; **[4]**

(iv) size of the net overall/shape of holes/eq, e.g. diamond shape; AVP; **[1]**

(v) fishery protection/patrol boats; inspection of fishing gear/nets; inspecting fish caught; record all fish catches/sticking to quota; use of GPS/satellite to track boats; fines for illegal acts/eq; impound boats; remove license; **[1]**

(c) (i) too much fish to process at once; so some may not be processed properly/go rotten/eq; 24hr working; storage problems; **[2]**

(ii) difficult to inspect every catch/easier to mix illegal fish with legal ones/eq; **[1]**

(iii) fishermen: safer working as more time off; still able to fish to the quota; stops price dropping quickly; time for repairs to boat; fishing gear;

fish processors: less storage problems; do not have to work long hours; less labour costs for night work/eq; fish can be processed without mistakes; time for plant cleaning/maintenance; **[4]**

(d) (i) 5.5 months/eq; **[1]**

(ii) can estimate the number of fish/eq; so can work out a quota; number of fishing days; when to start fishing; **[1]**

(iii) X = stop fishing /closed season starts/eq; **[1]**

(e) (i) get very tired; so have more injuries; men overboard/dro boats;

(ii) you still catch your quota/eq; so you should make th rest/see family/safer working; AVP;

(iii) 150 and 260;

(iv) highest pay: Nina (260/5 = 52);
lowest: Christobal (180/4 = 45);

(v) very little chance of overfishing/eq; as each year fishing days/quota adjusted to fish available; no further increase in licensed boats possible; not much illegal fishing possible; **[2]**

[Total: 36]

2 (a) (i) supply protein/vitamin D/omega oils; **[1]**

(ii) more people would want to eat anchovy after the week; most people could afford to buy anchovy; less ill health/eq/malnutrition in future; improved child health/reduce rickets; **[2]**

(iii) fish need preserving/chilling; transport has to be refrigerated; long distances so expensive/needs to be subsidised; not profitable; **[3]**

(b) no flooding as hardly any rainfall; no cold temps as coldest month is still 17 degrees/eq; not too hot; **[2]**

(c) (i) advantages: reduces further increase in shanty towns/eq; stops central district being just for business; better use of land; reduced need for transport to jobs in city; less energy used; AVP;

disadvantages: risk of collapse of taller buildings; people have less living space; little recreation space/green 'lungs' of city; may lead to overcrowding; more pollution; AVP; max three marks for advantages or disadvantages only **[4]**

(ii) three questions related to people's views;;; clear questions that are easily answered; e.g. Can you afford to live here? Do you have more work/regular job here? Is transport cheap? Other questions related to quality of life. **[4]**

(iii) idea of same number of people in each district; equal numbers of males and females; selected at random/other selection method described; same questions; **[2]**

(iv) orientation (bar chart); axes labelled; key; plots; **[4]**

(v) many people could see the cost of housing was lower (from newspapers/adverts); some people can still not afford them/eq; could not move for work; family reasons, so the policy did not help them; **[2]**

[Total: 24]