



External Assessment Report 2009

Subject	Managing Environmental Resources
Level	Intermediate 1

The statistics used in this report are pre-appeal.

This report provides information on the performance of candidates which it is hoped will be useful to teachers/lecturers in their preparation of candidates for future examinations. It is intended to be constructive and informative and to promote better understanding. It would be helpful to read this report in conjunction with the published question papers and marking instructions for the Examination.

Comments on candidate performance

General comments

The general standard of response was good. From some of the responses it is pleasing to note that centres are delivering the course with an obvious local dimension.

Question 1, based on an urban retail centre, was a successful settling in question with most candidates scoring well. Question 4, which was based on a rural estate, was also very well answered. Candidates would seem to have learned the principles of MER and are able to apply them in less familiar contexts.

Candidates did well in problem solving. Most were able to extract information from a passage, table, key or graph, perform simple calculations, draw conclusions, give explanations and make predictions.

Again, candidates have most difficulty with naming specific examples of environmental legislation, initiatives and organisations at the three different levels in Unit 1, Environmental Issues.

Centres are to be congratulated on presenting candidates at the correct level.

Areas in which candidates performed well

Candidates performed well in problem solving. In particular, Q1b, giving an explanation, Q5a, using a biological key, Q9b, analysis of information and Q8c, making a prediction were all very well answered.

In Q1a, the different types of environment (Unit 1.1) were well understood. In Q2c, most candidates remembered to complete the food chain with an arrow (Unit 2.1) and this was a welcome improvement. In Q4a, (except part v), the rural estate diagrams elicited responses which revealed that most candidates understood the concepts of habitat and land use. Candidates could extract information from the passage on whaling, Q6, and gave an opinion backed by an appropriate reason (6a part v). In 6e, most candidates recognised that fishing quota was the correct term. As Q7a, the equestrian centre, was mostly well answered. This indicated that the requirements and factors influencing a land industry and its role in the local economy were well understood (Unit 3, parts 2,3 and 4). Most candidates completed the bar graph correctly. Also most candidates, in Q9c, could give one other effect of acid rain (Unit 1.3)

Knowledge about the effects of human activity (Unit1.2) was displayed by responses in Q1f (supermarket trolleys), 3a (heat from waste incinerator), 7aiv (equestrian centre) and 9a (wind energy)

Areas which candidates found demanding

Candidates had difficulty in naming specific examples from Unit 1- Q2d, one other species in danger of extinction in a wetland habitat, Q6b, a local organisation, Q6c and Q8d, the national organisation for monitoring water quality. They also had difficulty in completing the definition of an ecosystem – Q2e.

Q2, based on a riverbank ecosystem, Unit 2, was found to be the most demanding question. However the more able candidates scored well.

Advice to centres for preparation of future candidates

When drawing pie charts, a ruler must be used and the sectors must meet in the centre of the chart. The use of a pencil is strongly recommended. If the lines are drawn over in ink, then the two lines should coincide.

Zero must be inserted, where appropriate, when completing the scale on an axis of a graph.

For Unit 1, Environmental Issues, candidates should be able to give named examples of Initiatives (1.4), Organisations (1.5) and Legislation (1.6) at local, national and international levels. In the past, this is where most candidates lost marks.

Candidates should understand the meaning of all the terms named in Unit 2.1, - Inter-relationships of an ecosystem. For Unit 2.2, the physical components of an ecosystem, candidates should be able to measure and record each of the following abiotic factors – temperature, light intensity, soil pH and soil water content (or soil moisture). The term biotic does not appear in the arrangements document.

Statistical information: update on Courses

Number of resulted entries in 2008	69
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Number of resulted entries in 2009	71
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Statistical information: Performance of candidates

Distribution of Course awards including grade boundaries

Distribution of Course awards	%	Cum. %	Number of candidates	Lowest mark
Maximum Mark - 80				
A	43.7%	43.7%	31	56
B	18.3%	62.0%	13	48
C	21.1%	83.1%	15	40
D	5.6%	88.7%	4	36
No award	11.3%	100.0%	8	-

General commentary on grade boundaries

- While SQA aims to set examinations and create marking instructions which will allow a competent candidate to score a minimum of 50% of the available marks (the notional C boundary) and a well prepared, very competent candidate to score at least 70% of the available marks (the notional A boundary), it is very challenging to get the standard on target every year, in every subject at every level.
- Each year SQA therefore holds a grade boundary meeting for each subject at each level where it brings together all the information available (statistical and judgemental). The Principal Assessor and SQA Qualifications Manager meet with the relevant SQA Business Manager and Statistician to discuss the evidence and make decisions. The meetings are chaired by members of the management team at SQA.
- The grade boundaries can be adjusted downwards if there is evidence that the exam is more challenging than usual, allowing the pass rate to be unaffected by this circumstance.
- The grade boundaries can be adjusted upwards if there is evidence that the exam is less challenging than usual, allowing the pass rate to be unaffected by this circumstance.
- Where standards are comparable to previous years, similar grade boundaries are maintained.
- An exam paper at a particular level in a subject in one year tends to have a marginally different set of grade boundaries from exam papers in that subject at that level in other years. This is because the particular questions, and the mix of questions are different. This is also the case for exams set in centres. If SQA has already altered a boundary in a particular year in say Higher Chemistry this does not mean that centres should necessarily alter boundaries in their prelim exam in Higher Chemistry. The two are not that closely related as they do not contain identical questions.
- SQA's main aim is to be fair to candidates across all subjects and all levels and maintain comparable standards across the years, even as arrangements evolve and change.