Principal Assessor Report 2002

Assessment Panel:	**Geology**

Qualification area

Subject(s) and Level(s) included in this report	**Geology – Intermediate 2**

Statistical information: update

Number of entries in 2001	28
Pre appeal	
Post appeal	

Number of entries in 2002	19
Pre appeal	
Post appeal	

General comments re entry numbers

Disappointingly, numbers fell to the level of 2000.

General comments

Most candidates performed well. Seven candidates achieved A grade awards with four of these gaining marks of 90/110 or higher. Only one candidate scored less than 40/110. The mean mark for the exam paper was 54.6/95 and the mean mark for the fieldwork study was 9.7/15. In percentage terms, the mean mark rose by 2.7% from 2001.

Grade boundaries at C, B and A for each subject area included in the report

A	77/110
B	66/110
C	55/110

General commentary on grade boundaries

Notional percentage cut-offs for each grade

Question papers and their associated marking schemes are designed to be of the required standard and to meet the assessment specification for the subject/level concerned.
For National courses the examination paper(s) are set in order that a score of approximately 50% of the total marks for all components merits a grade C (based on the grade descriptions for that grade), and similarly a score of 70 % for a grade A. The lowest mark for a grade B is set by the computer software as half way between the C and A grade boundaries.

Comments on grade boundaries for each subject area

As in previous years, the boundary for a C grade was set at half marks. This meant that 78.9% of candidates achieved a C grade or better. This was thought to represent a reasonable pass rate. The B and A grade boundaries (at 60 and 70% of the total marks, respectively) were thought to be appropriate.

Comments on candidate performance

General comments

Fieldwork studies were not moderated so no specific comments can be made. However, the mean mark of 9.7 / 15 suggests that most candidates performed well.

In the written paper, responses were generally more than satisfactory.

The main strengths were:

- Placing geological events into the correct order from oldest to youngest.
- Questions relating to fieldwork procedures.
- Describing the formation of geological structures.
- Questions relating to environments of deposition.

The main weaknesses were:

- Questions relating to properties of minerals and rocks.
- Describing the geological history of rocks seen in an outcrop.
- Morphology and identification of fossils.
- Performing calculations.
- Drawing and interpreting graphs.

Areas of external assessment in which candidates performed well

Q2	Identifying geological structures and placing structures in order of formation
Q3	Identifying geological structures and saying how they were formed
Q4(a) & (d)	Identifying an anticline on a map and placing structures in order of formation
Q5(c)	Saying how organisms lived
Q5(d)	Placing graptolites in order of age
Q5(e)	On zone fossils
Q6(a) & (b)	On fieldwork procedure
Q7(c)	Multiple choice question on isostasy
Q11	On environments of deposition

Areas of external assessment in which candidates had difficulty

Q1	Identification and properties of rocks and minerals.
Q4(b) & (c)	Determination of movement on a fault shown on a map. Identification of a thrust fault shown on a map. Identification of a thrust fault shown on a map.
Q5(a) & (b)	Identifying fossils; naming parts of fossils.
Q6(c)	Describing the geological history of rocks seen in an outcrop.
Q7(a) & (b)	Recognising and explaining isostatic uplift; performing a calculation; making and justifying predictions.
Q8	On plate tectonics. Responses were very variable but many candidates had problems with many parts of the question.
Q9	Performing calculations; drawing and reading from a graph; explaining a general relationship.
Q10	Selecting information and presenting it as a graph; providing explanations relating to the viscosity of magma.

Areas of common misunderstanding

- Performing calculations.
- Drawing and interpreting graphs.
- Naming fossils; morphology of fossils.
- Identifying minerals and rocks; properties of minerals and rocks.
- Describing the geological history of rocks seen in an outcrop.
- Determining the direction of movement of faults shown on a map.

Recommendations

Feedback to centres

Most candidates performed very well. Centres are to be warmly congratulated for seeing that their candidates were well prepared. Fieldwork studies were not moderated so no specific comments can be given.

In the exam paper, the main weaknesses are as follows:

- Identifying minerals and rocks; mineral and rock properties.
- Identifying fossils; fossil morphology.
- Performing calculations.
- Drawing and interpreting graphs.
- Describing the geological history of rocks shown in an outcrop.