

Principal Assessor Report 2002

Assessment Panel:

Geology

Qualification area

**Subject(s) and Level(s)
included in this report**

Geology – Intermediate 1

Statistical information: update

| | |
|----------------------------------|----|
| Number of entries in 2001 | 84 |
| Pre appeal | |
| Post appeal | |

| | |
|----------------------------------|----|
| Number of entries in 2002 | 49 |
| Pre appeal | |
| Post appeal | |

General comments re entry numbers

The number of candidates has shown a significant and disappointing decrease since 2001. Indeed, the number is much as it was in 2000.

General comments

Most candidates were of good quality. This is shown by the fact that the mean mark was 54/80 and that 20 candidates scored 60/80 and above. One candidate had a mark of 74/80. Only five candidates scored less than 40/80 the lowest mark being 23/80. The performance of candidates was slightly better than in 2001.

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

| | |
|---|-----------------|
| A | $\frac{56}{80}$ |
| B | $\frac{48}{80}$ |
| C | $\frac{40}{80}$ |

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

The boundary for a C grade, as in previous years, was set at half marks. This meant that 89.8% 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

Responses to most questions were satisfactory.

The main strengths were:

- ◆ Placing geological events into the correct order from oldest to youngest.
- ◆ Identification of landforms.
- ◆ Description of processes by which surface features are formed.
- ◆ Recognition of how different resistance of rocks to weathering and erosion effects the form of the land surface.
- ◆ Recognition of how geological problems affect civil engineering.

The main weaknesses were:

- ◆ Presenting information in tables.
- ◆ Drawing graphs and pie charts.
- ◆ Performing calculations.
- ◆ Identifying fossils.
- ◆ Naming minerals in rocks.
- ◆ Naming and drawing rocks.
- ◆ Marking the position of an anticline on a map.
- ◆ Saying how economically useful materials are formed, discovered, extracted and used.

Areas of external assessment in which candidates performed well

Q1 Structure and history of the Earth.

Q2(a) Placing the stages of forming a fossil in the correct order.

Q4 Placing geological events in order of formation; process of physical and chemical weathering.

Q5(b)

& (c) Identifying the rock which forms a dyke; placing geological events in order of formation.

Q6 Formation of spit and potholes.

Q7 Responses to this question were very variable but many candidates answered well.

Q8 Naming landforms; relating topography to the underlying geology.

Q9 Geological problems encountered by civil engineers.

Q10 Formation of oil and environmental effects of using and transporting oil.

Q11(a)

& (b) Definition of types of resources.

Areas of external assessment in which candidates had difficulty

Q2(b) Naming fossils and saying where the organism lived.

Q3 Identifying minerals in rocks; drawing and naming rocks.

Q5(a) Showing the position of an anticline on a map.

Q11(c) Constructing a table to show how resources are classified.

Q12(a)
& (b) On water resources.

Q12(c) Performing calculations and constructing a pie chart.

Q13 Saying how resource materials are formed, discovered, extracted and used.

Q14 Drawing a graph, explaining general relationships, calculating, justifying predictions.

Areas of common misunderstanding

- ◆ Presenting information in tables.
- ◆ Calculating.
- ◆ Drawing graphs.
- ◆ Providing explanations in problem solving contexts.
- ◆ Identifying fossils and naming their habitats.
- ◆ Naming minerals; naming and drawing rocks.
- ◆ Showing the position of an anticline on a map.
- ◆ Formation, discovery, extraction and use of resource materials.

Recommendations

Feedback to centres

Candidates performed very well. Centres are to be most warmly congratulated for seeing that their candidates were well taught and well prepared.

The main weaknesses lie in these areas:

- ◆ Identifying structures on geological maps.
- ◆ Identifying fossils.
- ◆ Aspects of problem solving (constructing tables, drawing graphs, calculating, providing explanations.)