

MEMORANDUM

To: C. Malinga – DMR

Date: 22 November 2012

From: E Venter – Examiner (Geology)

Re: Summary of observations – MMCC Geology examination – October 2012

The following is a summary of observations made during the marking of the October 2012 Geology papers.

The exam paper was divided in 3 sections; Questions 1 to 3 were on General Geology and the total sum of the achievable marks for this section was 20. Questions 4 and 5 covered Economic Geology and the total achievable marks for this section were 45. Questions 6 to 8 covered practical aspects and 35 marks were the achievable marks of these questions.

General Geology – Questions 1 and 2:

General Geology was the best answered section. The total average mark achieved for this section was 10 out of a possible 20 marks equating to an average of **50%** for this section. **Question 3** was the best answered at an average achieved mark of **84%** followed by **question 1** at **51%** and then **question 2** at **26%**.

Question 1 was divided into 2 questions that covered rocktypes (3/10) and their differences etc (7/10). The first part was well answered as it featured in most past papers. The second part was mostly incorrectly answered. It was a new question and was included to test the depth of the candidates understanding of the topic.

Question 2 was for a total of 6 marks and the candidates had to explain different erosional features. Not a new question but most candidates answered it poorly.

Question 3 was an old question presented with a different practical mining angle this question right.

Economic Geology – Questions 4 and 5:

The total average mark achieved for this section was 10.6 out of a possible 45 marks equating to an average of **24%** for this section. **Question 4** was the best answered at an average achieved mark of 9/30 (**29%**). **Question 5** average achieved mark was 2/15 (**13%**).

Question 4 was on the 3 major commodities being mined in South Africa, gold, platinum and coal, and the candidates were required to describe the formation and occurrence of these in South Africa. It was expected that the candidates would do well in this question but it was not showing clearly that most of the candidates did not prepare adequately.

Question 5 was on minor deposits and their formation. This was a new question that was also poorly answered.

Practical– Questions 6 to 8

Question 6 was a question on exploration methods and was mostly completely incorrectly answered. Average achieved mark was 1.4/10 (**14%**). Poor preparation for the exam was evident from the way in which this question was answered.

Question 7 covered the Resource and Reserve classification and was poorly answered as the average achieved mark was 0.6/5 (**11.6%**). This question has appeared in previous papers.

Question 8 was a practical problem. The question was more difficult than the ones asked in recent papers but should have not posed problems to candidates that understand the concepts. Average achieved mark was 1.3/20 (**6.4%**) and the most poorly answered question.