



General Certificate of Secondary Education

Chemistry 4421

CHY3F Unit Chemistry 3

Report on the Examination

2008 Examination – June Series

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Set and published by the Assessment and Qualifications Alliance.

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Chemistry

Foundation Tier CHY3F

General

Questions 6 and 7 were standard demand questions and were common with Questions 1 and 2 on the Chemistry Higher Tier Paper (CHY3H).

This report should be read in conjunction with the published Mark Scheme.

Question 1 (*Low Demand*)

Many candidates were able to gain full marks. Some candidates worked out the average in part (a)(i).

Question 2 (*Low Demand*)

This question was quite well attempted. The candidates were able to use the information provided and the Data Sheet to answer the questions correctly.

Some candidates wrote a gas was given off or heat was produced for part (a)(ii).

For part (b)(i) a few candidates wrote Lithium.

Some candidates gave vague answers for part (d), such as he left them out and a few copied the following statement from the Data Sheet Elements with atomic numbers 112-116 have been reported but not fully authenticated.

Question 3 (*Low Demand*)

Generally this question was quite well answered. The candidates were more familiar with the test for carbon dioxide than they were with ammonia.

In part (a)(i) quite a few candidates wrote water as their answer for testing carbon dioxide. Some wrote limestone.

For part (a)(ii) a number of candidates wrote hydrochloric acid as the reagent. Many got the gas wrong, some candidates even writing sodium hydroxide. Almost all candidates got litmus correct as they were able to associate paper with it.

In part (b) a large number of candidates said that it doesn't react or wouldn't react with the flame but did not mention that there would be no colour.

Question 4 (*Low Demand*)

This question was quite well attempted.

Some candidates divided 25 by 4 and got the answer 6.25 for part (a)(ii).

A number of candidates thought that the answer to part (a)(iii) was kilograms.

In part (b)(i) almost all candidates gained 1 mark for saying that chips contain fat but a lot of candidates were unable to pick out the fact that fat has high energy content.

For part (b)(ii) a few candidates repeated the question by saying too much fat is unhealthy or gave vague answers such as fat is not good for you. Some wrote that it was because of the large amount of salt that is added to chips.

Question 5 (Low Demand)

The majority of the candidates were able to gain full marks.

Quite a few candidates were unable to gain the filter mark for part (b) as they were talking in terms of filtering large objects. Some even thought that it removes the salt. There were some candidates who gave the correct answers but did not mention which answer referred to which process.

Question 6 (Standard Demand)

Very few candidates gained a mark in part (a)(i). Some candidates gave the symbol with no charge while quite a few wrote chlorine. A few other incorrect named ions or atoms appeared occasionally.

For part (a)(ii) many candidates were aware that Universal Indicator could be used but were unable to give the correct colour changes. A large number of candidates used titration as their answer. Some also mentioned litmus. A few candidates talked in terms of number of atoms in each acid. Most correct responses came from reactivity differences. No candidates gave answers in terms of conductivity differences.

The candidates were able to pick out the points from the information given and almost all gained full marks on parts (b)(i) and (b)(ii).

Question 7 (Standard Demand)

The vast majority of the candidates made a good attempt at drawing a smooth curve for part (a).

The majority of the candidates for part (b) were able to pick out the fact that the curve changes direction. Some candidates wrote that it was a curve and a straight line while a few said that the temperature increased and decreased.

The majority of the candidates gained the mark for part (c). Some candidates wrote that there were no anomalous results.

In part (f) many candidates were able to gain 1 mark for 46 or 19 but they were unable to process the data to get the second mark.

Saturated solution was generally poorly understood by candidates attempting part (g). Some candidates confused it with hydrocarbon chemistry and were talking in terms of double bonds.

Mark Ranges and Award of Grades

Grade boundaries and cumulative percentage grades are available on the [Results Statistics](#) page of the AQA Website.