

_____ **Name**

_____ **Student #**

**CHEMISTRY 3PA3 Section #1
VERSION # 1**

DAY CLASS

DURATION OF EXAM: 3 Hours.

INSTRUCTOR: Paul W. Ayers (x24505; ayers@mcmaster.ca)

McMASTER UNIVERSITY DEFERRED FINAL EXAMINATION

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THIS EXAMINATION PAPER CONTAINS 13 PAGES AND 25 QUESTIONS. YOU ARE RESPONSIBLE FOR ENSURING THAT YOUR COPY OF THE PAPER IS COMPLETE. BRING ANY DISCREPANCY TO THE ATTENTION OF THE INVIGILATOR.

SPECIAL AIDS:

Any calculator can be used.

Immediately following this page is a list of formulas and experimental data that you may find helpful.

In all portions of this exam, be very careful to record the units in which you are giving your answer.

Instructions:

The exam is scored out of 100 points.

There are TWENTY short-answer questions in this exam. Answer all of them. Use the exam booklet when there is not room to write your answer on the exam paper. When you use the exam booklet, write on the exam "in booklet" so that I know to look there. Each short-answer question is worth 3 points.

There are FIVE long-form problems in this exam. Pick FOUR of the problems and answer them in the exam booklet. Each problem is worth 10 points.

Write you work clearly and neatly. Clearly label the problems you work in the exam booklet. Be careful with your units. Partial credit is available, but only if your work is clear, neat, and easy to follow.

Page 2: Periodic Table

Pages 3 & 4: formula sheet & conversion factors.

Pages 5-10: 20 short-answer questions.

Pages 11-13: 5 long-form problems. (Pick 4 of 5).