

1. DO NOT TURN THIS PAGE UNTIL DIRECTED TO DO SO.
2. The exam consists of two parts: multiple choice questions and free response questions. Multiple choice questions are found on pages 2–6 of the test. Free response questions are found on pages 7–12 of the test. Page 1 lists some important constants and other information that you might need when working on the problems. The periodic chart and solubility chart are also provided.
3. Multiple choice part of the test is machine graded; therefore, be sure to use a No. 1 or 2 pencil for marking the answer sheet.
4. Completely blacken the answer circle. If you change an answer, erase completely the previous mark.
5. You may remove your answer sheet (scantron), as well as the periodic chart and Page 1, from this booklet. If you have a pink test, the scantron should be marked as A, while if you have a blue test, the scantron should be marked as B. If it is not, notify your instructor immediately.
6. Fill in your last name, first name, and initial. Blacken the corresponding letters below.
7. Fill in your ID number. CAREFULLY, blacken the corresponding numbers below.
8. Fill in the Dept., Course No., and Section. The Dept. = CHEM, the Course No. = 101, and your section refers to your lab section.
9. Please, make sure to write your name and section number on the top of Pages A-2 and A-7 (or Pages B-2 and B-7) of the test.
10. READ THE TEST CAREFULLY. The time limit on this test is 120 minutes.
11. Use the test for scratch paper.
12. Mark your answers in this booklet as well as on the answer sheet so you can check your score with the key after the test.
13. There are **29 questions** in the test. Questions 1 through 15 are multiple choice and questions 16 through 29 are free response. For each question the number of points awarded for the correct answer is shown. The total number of points possible is 210 for the multiple choice part and 180 for the free response part.
14. If you need to leave the room during the exam, you have to turn in your test and then one of the TAs will accompany you out of the room. When you return, you will get your test back.
15. When you finished, turn in your scan sheet and the test, show your student ID, and leave the room quietly.
16. A key will be on the electronic class bulleting board at 11:00 p.m. This is accessed through the class homepage (<http://www.chem.tamu.edu/class/fyp/shatruk/>). The class average will also be posted when it is confirmed.
17. Grades for the free response part of the test will be posted on the class homepage by Sunday evening. Grades for the multiple choice part will be posted by Monday afternoon.