

Spring '07  
Hackert

CH370/387D  
FINAL EXAM

Name \_\_\_\_\_  
UT eID \_\_\_\_\_

**\*\* THIS IS YOUR ANSWER SHEET \*\***

Place all responses on the blanks provided.

YOU WILL NEED TO TURN IN BOTH YOUR EXAM *PLUS* THIS SHEET.  
HOWEVER, ALL ANSWERS SHOULD APPEAR ON THIS ANSWER SHEET.

Given:  $R = 8.314 \text{ J/mol-K} = 8.314 \times 10^7 \text{ g-cm}^2 / (\text{sec}^2\text{-mol-K})$ ;  $\text{RCF} = (1.119 \times 10^{-5})(\text{rpm})^2(r)$ ;  
 $r_{\text{water}} = 1.00 \text{ g/cm}^3$ ;  $h = 0.010 \text{ g/(cm-sec)}$ ;  $s = M(1 - n'r)/N^0f$ ;  $D = kT/f$ ;  
 $(1/c_r)(dc_r/dr) = Mw^2r(1 - n'r)/RT$ ;  $c = 3.0 \times 10^8 \text{ m/s}$ ;  $h = 6.63 \times 10^{-34} \text{ J-sec}$ ;  
 $k = 1.38 \times 10^{-23} \text{ J/K}$ ;  $q = [S]/(Kd + [S])$ ;  $n = n - nKd/[S]$ ;  $E = (g h m H)/2p$ ;  
 $n? = 2d\sin?$ ;  $g \text{ for } ^1\text{H} = 26.7 \times 10^7 \text{ rad/sec-T}$ ;  $A = A_0 \exp(-kt)$ ;  $k = \ln(2)/t_{1/2}$   
 $KC/R_q = 1/(M \cdot P(q)) + 2 A_2C$ ;  $N^0 = 6.02 \times 10^{23}$

- |                   |           |   |           |
|-------------------|-----------|---|-----------|
| 1. _____          | 21. _____ | 41. _____                                 | 50. _____ |
| 2. _____          | 22. _____ | 42. _____                                 | 51. _____ |
| 3. ____/____/____ | 23. _____ | 43. _____                                 | 52. _____ |
| 4. _____          | 24. _____ | 44. _____                                 | 53. _____ |
| 5. _____          | 25. _____ | 45. _____                                 | 54. _____ |
| 6. _____          | 26. _____ | 46. _____                                 | 55. _____ |
| 7. _____          | 27. _____ | 47. _____                                 | 56. _____ |
| 8. _____          | 28. _____ | 48. _____                                 |           |
| 9. _____          | 29. _____ | 49. _____                                 |           |
| 10. _____         | 30. _____ | Identify cmpds. by <b>name or abbrev.</b> |           |
| 11. _____         | 31. _____ | 57. _____                                 |           |
| 12. _____         | 32. _____ | 58. _____                                 |           |
| 13. _____         | 33. _____ | 59. _____                                 |           |
| 14. _____         | 34. _____ | 60. _____                                 |           |
| 15. _____         | 35. _____ | 61. _____                                 |           |
| 16. _____         | 36. _____ | 62. _____                                 |           |
| 17. _____         | 37. _____ | 63. _____                                 |           |
| 18. _____         | 38. _____ | 64. _____                                 |           |
| 19. _____         | 39. _____ | 65. _____                                 |           |
| 20. _____         | 40. _____ | 66. _____                                 |           |
|                   |           | 67. _____                                 |           |

**FINAL EX TOTAL = \_\_\_\_\_ COURSE TOTAL PTS = \_\_\_\_\_ CH370/387D GRADE \_\_\_\_\_**

Your answer sheet and course grade should be ready for pickup by 3:00 pm, Friday, May 11<sup>th</sup> at the office. Electronic posting of Grades should be available about the same time.