CHM 1020 PRACTICE EXAM #3

NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. A solution with a pH of 10 would taste sour if tasted.
2. True
3. False
4. What is the pH of a solution that has a hydrogen ion concentration of 1.0 × 10-12?
5. 12
6. 7
7. 2
8. 14
9. What is the reducing agent in the reaction 2 Al(s) + 3 Cu2+(aq) → 2 Al3+(aq) + 3 Cu(s)?
10. Cu2+(aq)
11. Al3+(aq)
12. Cu(s)
13. Al(s)
14. Bleaches and hydrogen peroxide are common oxidizing agents.
15. True
16. False
17. Water is one product from the neutralization of magnesium hydroxide and carbonic acid. What is the other product?
18. MgCO2
19. MgCO3
20. Mg(OH)2
21. Mg2CO3
22. Which of the following would cause the pH to increase when it is dissolved in water?
23. NaCl
24. Ba(OH)2
25. H2SO4
26. HCl
27. Metal corrosion is a reduction process.
28. True
29. False
30. How many carbon atoms are in a molecule of hexene?
31. 3
32. 7
33. 4
34. 6
35. What is the IUPAC name of CH2=CH-CH3?
36. 1-propene
37. 1-propyne
38. 1-propane
39. 1-propine
40. CH3CH2OH is a member of what family of compounds?
41. amino acids
42. amines
43. amides
44. alcohols
45. Which of the following, when dissolved in water, will lower the pH?
46. CH3CH2NH2
47. CH3CH3
48. CH3OH
49. CH3CH2COOH
50. Which of the following is an ester?
51. CH3CH2COOCH3
52. CH3CH2COOH
53. CH3CH3
54. CH3OH

13. Hexene is a saturated hydrocarbon.

1. True
2. False

14. Methanol and propanol are homologs.

1. True
2. False

1. Ethanol is a hydrocarbon.
2. True
3. False

1. Which of the following is an isomer of propanol?
2. CH3CH2OOH
3. CH3CH2OCH3
4. CH3OCH3
5. CH3CH2OH

1. How many hydrogen atoms are in a molecule of cyclopentane?
2. 5
3. 8
4. 12
5. 10