**SAMPLE TEST FOR ENTRANCE EXAM IN CHEMISTRY**

**AT MEDICAL FACULTY, TRAKIA UNIVERSITY, STARA ZAGORA**

**Mark the correct answer with X**

1. **What is electronegativity?**
2. The amount of energy released when an electron is added to an atom
3. The charge on an atom in its preferred oxidation state
4. The power of an atom to attract electrons to itself
5. None of the above
6. **The electrons in a nonpolar covalent bond are**
7. Gained
8. Lost
9. Shared equally
10. Shared unequally
11. **Hydrogen bonding would be seen in a sample of which of the following substances**
12. CH4
13. H2
14. H2O
15. None of the above
16. **Select the ionic compound**
17. CO2
18. P2O5
19. N2O3
20. MgO
21. **Select the substance with intermolecular hydrogen bonds**
22. CH4
23. H2
24. NaH
25. H2O
26. **What is the chemical character of K2O?**
27. Acidic
28. Basic
29. Amphoteric
30. Metallic
31. **Which of the series below contains only acids?**
32. NaOH, Ca(OH)2, LiOH
33. NaOH, K, CaO
34. NaOH, SO2, S
35. HCl, H2CO3, H2SO4
36. **What is the chemical character of H2CO3?**
37. Acidic
38. Basic
39. Amphoteric
40. Metallic
41. **Select the strong electrolyte**
42. CH3COOH
43. NH4OH
44. HNO3
45. H2CO3
46. **Which of the series below contains only bases**
47. NaOH, KOH, LiOH
48. NaOH, K, Ca
49. NaOH, KOH, S
50. KOH, LiOH, H2SO4
51. **What are the products of reaction Na + HCl →?**
52. Salt and hydrogen
53. Hydride and base
54. Basic and acidic oxides
55. Acid and base
56. **What is the formula of the compound whose name is Fe (III) carbonate?**
57. Fe2CO3
58. FeCO3
59. Fe3(CO3)2
60. Fe2(CO3)3
61. **What is the name of the compound whose formula is MgSO4 ?**
62. Manganese (II) sulfate
63. Manganese (II) sulfite
64. Magnesium (II) sulfide
65. Magnesium (III) sulfite
66. **pH is a concentration unit used to measure the concentration of**
67. Anions in a solution
68. Hydrogen ions in a solution
69. Cations in a solution
70. Hydroxyl ions in a solution
71. **What does a catalyst do?**
72. Speeds up or slow down a reaction and is not used up in the reaction
73. Slows down a reaction and is not used up in the reaction
74. Speeds up or slow down a reaction and is used up in the reaction
75. Slows down a reaction and is used up in the reaction
76. **Endothermic reaction is**
77. One that releases energy
78. One that absorbs energy
79. Reaction of oxidation
80. The phase change liquid-solid
81. **Select the correct name for the following compound C6H5OH**
82. Styrene
83. Toluene
84. Xylene
85. Phenol
86. **Which of the following is a methylene group**
87. A CH4 group
88. A CH3 group
89. A CH2 group
90. A CH group
91. **Phenol is a derivative of an**
92. Alkane
93. Alkene
94. Alkyne
95. Aromatic hydrocarbons
96. **Alkenes have the general formula**
97. CnH2n
98. CnH2n-2
99. CnHn
100. C2nHn