

## Chemistry - Model Question Paper

76. [BT:A] Picric acid and benzoic acid can be distinguished by the aqueous solution of \_\_\_\_\_.
- (A)  $\text{NaHCO}_3$       (B)  $\text{Na}_2\text{CO}_3$       (C)  $\text{NaOH}$       (D)  $\text{FeCl}_3$
77. [BT:K] Air pollution is caused by \_\_\_\_\_.
- (A) industries    (B) automobiles    (C) pollen grains    (D) All of these
78. [BT:K] Soaps are obtained by \_\_\_\_\_.
- (A) saponification of oils or fats    (B) alkaline hydrolysis of glycerol  
(C) acidic hydrolysis of esters of fatty acids and glycerol    (D) All of these
79. [BT:K] Ascorbic acid is the chemical name of \_\_\_\_\_.
- (A) vitamin D    (B) vitamin A    (C) vitamin C    (D) vitamin B<sub>6</sub>
80. [BT:A] The process involving heating of rubber with sulphur is called \_\_\_\_\_.
- (A) galvanization    (B) vulcanization    (C) bessemerization    (D) sulphonation
81. [BT:C] Ethyl alcohol on oxidation with  $\text{K}_2\text{Cr}_2\text{O}_7$  gives \_\_\_\_\_.
- (A) acetic acid    (B) acetaldehyde    (C) formaldehyde    (D) formic acid
82. [BT:K] Lucas test is performed for \_\_\_\_\_.
- (A) amines    (B) alcohols    (C) ethers    (D) alkyl halides
83. [BT:C]. Ethene is obtained from ethyl bromide by \_\_\_\_\_.
- (A) Nucleophilic substitution    (B) hydrolysis    (C) simple heating  
(D) dehydrohalogenation
84. [BT:C]. Which of the following is an example of elimination reaction?
- (A) Chlorination of methane    (B) Dehydration of ethanol  
(C) Nitration of benzene    (D) Hydroxylation of ethylene

85. [BT:K] Which of the following is an aromatic hydrocarbon?  
(A) cyclo pentene (B) cyclo hexane (C) naphthalene (D) 1,3-butadiene
86. [BT:K] According to Werner's theory the secondary valencies of a central metal atom correspond to its\_\_\_\_\_.  
(A) oxidation state (B) coordination number (C) sum of the two  
(D) none of these
87. [BT:C] Most common oxidation states shown by cerium are\_\_\_\_\_.  
(A) +2,+4 (B) +3,+4 (C) +3,+5 (D) +2,+3
- 88.[BT:K]. Quartz is the crystalline variety of  
(A) Si (B) SiO<sub>2</sub> (C) Na<sub>2</sub>SiO<sub>3</sub> (D) SiC
- 89.[BT:K]. Heavy water is used in atomic reactor as\_\_\_\_\_.  
(A) coolant (B) moderator (C) both coolant and moderator  
(D) neither coolant nor moderator
90. [BT:C] The main function of roasting is\_\_\_\_\_.  
(A) reduction (B) oxidation (C) concentration (D) separation
91. [BT:A] The shortest c-c bond distance is found in\_\_\_\_\_.  
(A) Diamond (B) Ethane (C) Benzene (D) Acetyline
92. [BT:K] Which is of the following has the largest radius?  
(A) K<sup>+</sup> (B) Cl<sup>-</sup> (C) O<sup>2-</sup> (D) Cr<sup>3+</sup>
93. [BT:C]. The principal and azimuthal quantum number of electrons in 4f orbitals are\_\_\_\_\_.  
(A) 4,2 (B) 4,4 (C) 4,3 (D) 3,4

94. [BT:K] Which of the following indicates the charge on colloidal particles?  
 (A) Brownian movement (B) electrophoresis (C) electrolysis (D) tyndall effect
95. [BT:C] Effect of temperature on reaction rate is given by\_\_\_\_\_.  
 (A) Clausius-Clapeyron equation (B) Gibbs-Helmholtz equation  
 (C) Arrhenius equation (D) Kirchoffs equation
96. [BT:C] Which of the following has highest value of standard reduction potential  
 (A)  $F_2$  (B)  $Cl_2$  (C)  $Br_2$  (D)  $I_2$
97. [BT:A]  $BF_3$  is\_\_\_\_\_.  
 (A) Lewis acid (B) Lewis base (C) Bronsted acid (D) Arrhenius acid
98. [BT:K] For the manufacture of ammonia by the reaction  $N_2 + 3H_2 \rightleftharpoons 2NH_3 + 21.9kcal$   
 the favourable condition are \_\_\_\_\_.  
 (A) low temperature, low pressure and catalyst  
 (B) low temperature, high pressure and catalyst  
 (C) high temperature, low pressure and catalyst  
 (D) high temperature, high pressure and catalyst
99. [BT:C]  $\Delta H$  neutralization is always \_\_\_\_\_.  
 (A) positive (B) negative (C) zero (D) can be positive or negative
100. [BT:C] The molar solution of sulphuric acid is equal to \_\_\_\_\_.  
 (A) N solution (B) 2 N solution (C) N/2 solution (D) 3 N solution

### Answers (Chemistry)

76. (D) 77. (D) 78. (A) 79. (C) 80. (B) 81. (A) 82. (B) 83. (D) 84. (B) 85. (C)  
 86. (B) 87. (B) 88. (B) 89. (C) 90. (B) 91. (D) 92. (C) 93. (C) 94. (B) 95. (C)  
 96. (A) 97. (A) 98. (B) 99. (B) 100. (B)