# NAT I Medical Chemistry

| Sr | Questions | Answers Choice |
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| 1 | $SO_2$ and $NO_2$ pollution by increasing | A. Alkalinity<br>B. Acidity<br>C. Neutrality<br>D. Buffer action |
| 2 | Which of the following pairs are chemically dissimilar? | A. Na and K<br>B. Ba and Sr<br>C. Zr and Hf<br>D. Ca and Zn |
| 3 | How many moles of Helium gas occupy 22.4 L at $0^oC$ at 1 atm.Pressure? | A. 0.11<br>B. 0.90<br>C. 1.0<br>D. 1.11 |
| 4 | Inter molecular forces in solid hydrogen are | A. Covalent forces<br>B. Van der Waal forces or London dispersion force<br>C. Hydrogen bonds<br>D. All of these |
| 5 | Crystal can be classified in to basic crystal habits | A. 7<br>B. 4<br>C. 14<br>D. 3 |
| 6 | Sodium metal cannot be stored under | A. Benzene<br>B. Kerosene oil<br>C. Alcohol<br>D. Toluene |
| 7 | Which of the following cannot be produced by acidic dehydration of alcohols? | A. Ethers<br>B. Aldehyde<br>C. Alkyl Hydrogen sulphate<br>D. Alkene |
| 8 | Which of the following is acidic? | A. SO<sub>3</sub><br>B. N<sub>2</sub>O<br>C. BeO<br>D. HgO |
| 9 | Isopropyl alcohol on oxidation forms | A. Acetone<br>B. Ether<br>C. Ethylene<br>D. Acetaldehyde |
| 10 | Which of the following units represents largest amount of energy? | A. Calorie<br>B. Joule<br>C. Erg<br>D. Electron vol. |
| 11 | Which of the following substances is used as an antiknock compound? | A. Tetraethyl lead<br>B. Lead tetrachloride<br>C. Lead acetate<br>D. Ethyl acetate |
| 12 | 2 g oxygen contains number of atoms equal to that in | A. 0.5 g of hydrogen<br>B. 4 g of sulphur<br>C. 7 g of nitrogen<br>D. 2.3 g of sodium |
| 13 | Which is not a colligative property? | A. Osmotic pressure<br>B. Lowering of vapour pressure<br>C. Depression of freezing point<br>D. Elevation of boiling point |
| | Which of the following will not change the concentration of ammonia in the equilibrium | A. Increase of pressure |

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| 14 | Which of the following will not change the concentration of ammonia in the equilibrium $N_2(g) + 3H_2(g) \rightleftharpoons 2NH_3(g)$: $\Delta H = -kj$ | B. Increase of temperature<br>C. Decrease of volume<br>D. Addition of catalyst |
| 15 | For preparing an alkane, a concentrated aqueous solution of sodium or potassium salt of saturated carboxylic acid is subjected to | A. Hydrolysis<br>B. Oxidation<br>C. Hydrogenation<br>D. Electrolysus |
| 16 | Evaporation of water is | A. An exothermic change<br>B. An endothermic change<br>C. A process where no heat changes occur<br>D. A process accompanied by chemical |
| 17 | Toluene can be oxidized to benzonic acid by | A. KMnO4 (alk)<br>B. K<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>(acidic)<br>C. Both<br>D. None |
| 18 | A current of 9.65 ampere flowing for 10 minutes deposits 3.0 g of the metal which is monovalent the atomic mass of the metal is | A. 10<br>B. 50<br>C. 30<br>D. 96.5 |
| 19 | Calcium cyanamide on treatment with steam under pressure gives $NH_3$ and | A. Calcium carbonate<br>B. Calcium hydroxide<br>C. Calcium oxide<br>D. Calcium bicarbonate |
| 20 | 1-Chloropropane has two isomers It is an example of | A. Chain isomerism<br>B. Position isomerism<br>C. Functional group isomerism<br>D. Metamerism |