# NAT I Engineering Chemistry

| Sr | Questions | Answers Choice |
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| 1 | In cold countries ethylene glycol is added to water in radiators of cars during winter It result in | A. Lowering in b.pt.<br>B. Reducing viscosity<br>C. Reducing specific heat<br>D. Lowering in freezing pt. |
| 2 | The halide which is not hydrolysed is | A. SiCl<sub>4</sub><br>B. SiF<sub>4</sub><br>C. CCl<sub>4</sub><br>D. PbCl<sub>4</sub> |
| 3 | Magnesium keeps on burning in | A. N<sub>2</sub><br>B. CO<sub>2</sub><br>C. N<sub>2</sub>O<br>D. N<sub>2</sub> as well as CO<sub>2</sub> |
| 4 | The principle constituent of pyrex glass is | A. Zn<br>B. B<br>C. Pb<br>D. Cl |
| 5 | The ratio of the ionization energy of H and $Be^{3+}$ is | A. 1 : 1<br>B. 1 : 3<br>C. 1 : 9<br>D. 1 : 16 |
| 6 | Which is true for an element R present in group 13 of the periodic table? | A. It is a gas at room temperature<br>B. It has oxidation state of +4<br>C. It forms R<sub>2</sub>O<sub>3</sub><br>D. It forms RX<sub>2</sub> |
| 7 | The dimension of rate constant of a second order reaction involves | A. Neither time nor concentration<br>B. Only time<br>C. Time and concentration<br>D. Time and square of concentration |
| 8 | Which of the following geometry is associated with the compound in which the central atom assumes $sp^3$ d hybridization? | A. Planar<br>B. Pyramidal<br>C. Angular<br>D. Trigonal bipyramidal |
| 9 | Ozone is not | A. An allotrope<br>B. A powerful oxidizing agent<br>C. Paramagnetic<br>D. A bent molecule |
| 10 | 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 |
| 11 | 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 |
| 12 | Covalent compounds are soluble in | A. Polar solvents<br>B. Non-polar solvents<br>C. Concentrated acids<br>D. All solvents |
| 13 | Which of the following halogens does not forms its oxyacids? | A. Fluorine<br>B. Chlorine<br>C. Bromine<br>D. Iodine |
| 14 | The symbol of the element whose atoms have the outer most electronic configuration $2s^2$ $2p^3$ is | A. N<br>B. Li<br>C. P<br>D. Na |

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| 15 | 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 |
| 16 | Carbon atom holding halogen in aryl halides is | A. Sp<sup>2</sup>-hybridesed<br>B. Sp<sup>3</sup>-hybridesed<br>C. Sp-hybridesed<br>D. Sp<sup>3 </sup>d -hybridesed |
| 17 | In N.W.F.P the phosphate fertilizer are produced at | A. D.I.Khan<br>B. Haripur<br>C. Nowshera<br>D. Dargai |
| 18 | Hybridization explain the------- of orbitals | A. Type of Bonding<br>B. Shapes<br>C. Shape and Type of bonding<br>D. None of above |
| 19 | The treatment of benzene with isobutene in the presence of sulphuric acid give | A. Isobutyl benzene<br>B. Tert-Butyl benzene<br>C. n-Butyl benzene<br>D. no reaction |
| 20 | 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 |