

NAT I Engineering Chemistry

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| Sr | Questions | Answers Choice |
| 1 | Which of the following units represents largest amount of energy? | A. Calorie B. Joule C. Erg D. Electron vol. |
| 2 | Evaporation of water is | A. An exothermic change B. An endothermic change C. A process where no heat changes occur D. A process accompanied by chemical |
| 3 | Inter molecular forces in solid hydrogen are | A. Covalent forces B. Van der Waal forces or London dispersion force C. Hydrogen bonds D. All of these |
| 4 | According to MO Theory the species O ⁺ ₂ possesses | A. Bond order of 2.5 B. Three unpaired electrons C. Diamagnetic character D. Stability lower then O ₂ |
| 5 | The bond angle H - O - H in ice is closest to | A. 120°, 28° B. 60° C. 90° D. 109° |
| 6 | The carbon atoms in calcium carbide are held by | A. lonic bonds B. 2 sigma bonds C. 2 covalent one co-ordinate bond D. 2 π and one σ bond |
| 7 | Which of the following geometry is associated with the compound in which the central atom assumes \mbox{sp}^3 d hybridization? | A. Planar B. Pyramidal C. Angular D. Trigonal bipyramidal |
| 8 | Covalent compounds are soluble in | A. Polar solvents B. Non-polar solvents C. Concentrated acids D. All solvents |
| 9 | Among the alkaline earth metals the element forming predominantly covalent compounds is | A. Be B. Mg C. Sr D. Calcium |
| 10 | Hydrogen chloride molecule contains | A. Covalent bond B. Double bond C. Co-ordinate bond D. Electrovalent bond |