**I.P.S.Sr.Sec.School**

**Max Time : 1 hr** **Class : 11th Chemistry Max Marks : 30**

**Monthly Test**

1. Draw the structure of the organic compounds given below: [ 1 x 5 = 5 ]

(a) Hex-2-en-1-ol (b) Butane (c) Pentanoic acid

(d) Oct-3-en-5-yne (e) Hexan-1-al.

1. Draw the shape and write the hybridization of the following complexex: [ 1 x 5 = 5 ]

(a) XeO3F2 (b) IF7 (c) (d) SO3 (e) CCl4

1. Differntiate between Bonding Molecular orbital and Antibonding Molecular Orbitals. [ 3 ]
2. Balance the following equations by acidic medium [ 3 x 2 = 6 ]
3. (aq) + C2H4O (g) → Cr3+ (aq) + C2H4O2 (aq).
4. Cu (aq) + (aq) Cu2+ (aq) + NO2 (g).
5. (aq) + Fe2+ (aq) → Mn2+ (aq) + Fe3+ (aq)
6. Convert the following : [ 3 x 2 = 6 ]

(a) Benzene to Toluene (b) Benzene to acetophenone (c) Propene to propan-2-ol.

1. Draw the molecular orbital diagram of O2. Write its molecular electronic configuration and also calculate the bond order of O2. [ 5 ]

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