



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

WORKSHEET-65(CLASS-12)

TOPIC- COORDINATION COMPOUNDS

SUBTOPIC- PART-2



SUBJECT – CHEMISTRY

DURATION – 30 mins

F.M. - 15

DATE – 09.11.20

1. **pi-bonding is not present in-**

a. Ferrocene b. Grignard reagent c. Zeise's salt d. Dibenzene chromium

2. **Change in composition of co-ordination sphere yields which types of isomers-**

a. None of these b. Ionisation c. Optical d. Geometrical

3. **The neutral ligand is-**

a. Hydroxo b. Chloro c. Oxalato d. Ammine

4. **What is the use of tetraethyl lead?**

a. For reducing knocking b. As a catalyst in addition reaction of alkenes

c. As a catalyst in polymerization reaction of alkenes d. For creating knocking

5. **The complex compounds which result from the coordination of carbon monoxide are known as-**

a. Carbonates b. Carbon permono c. Electronic d. Carbonyls

6. **The oxidation number of cobalt in $K[Co(CO)_4]$ is-**

a. +3 b. +1 c. -3 d. -1

7. **The type of isomerism present in nitropentamine chromium (III) chloride is-**

a. Polymerisation b. Linkage c. Ionization d. Optical

8. **Which is the example of hexadentate ligand?**

a. Dimethyl glyoxime b. 2, 2—dipyridyl c. Aminodiacetate ion d. Ethylene diammine tetra acetate ion [EDTA]

9. **d^2sp^3 hybridisation leads to-**

a. Tetrahedral shape b. Hexagonal shape c. Trigonal bipyrimidal d. Octahedral shape

10. **What is the EAN of nickel in $Ni(CO)_4$?**

a. 34 b. 36 c. 32 d. 35

11. In $[\text{NiCl}_4]^{2-}$, the number of unpaired electron is-

a. 2 b. 4 c. 4.5 d. 3

12. The IUPAC name of $[\text{Ni}(\text{CO})_4]$ is-

a. Tetra carbonyl nickelate (II) b. Tetra carbonyl nickelate (0) c. Tetra carbonyl nickel (II)

d. Tetra carbonyl nickel (0)

13. Which one of the following is an inner orbital complex as well as diamagnetic in behaviour (Atomic number: Zn = 30, Cr = 24, Co = 27, Ni = 28)-

a. $[\text{Cr}(\text{NH}_3)_6]^{3+}$ b. $[\text{Zn}(\text{NH}_3)_6]^{2+}$ c. $[\text{Ni}(\text{NH}_3)_6]^{2+}$ d. $[\text{Co}(\text{NH}_3)_6]^{3+}$

14. AgCl precipitate dissolves in ammonia due to the formation of-

a. $[\text{Ag}(\text{NH}_4)_2]\text{OH}$ b. $[\text{Ag}(\text{NH}_3)_2]\text{OH}$ c. $[\text{Ag}(\text{NH}_3)_2]\text{Cl}$ d. $[\text{Ag}(\text{NH}_4)_2]\text{Cl}$

15. How many ions are produced in aqueous solution of $[\text{Co}(\text{H}_2\text{O})_6]\text{Cl}_2$ –

a. 3 b. 2 c. 4 d. 6

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