

# ST. LAWRENCE HIGH SCHOOL A JESUIT CHRISTIAN MINORITY INSTITUTION SOLUTION-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

#### Answer: b

- 2. Change in composition of co-ordination sphere yields which types of isomers-
- a. None of these b. Ionisation c. Optical d. Geometrical

#### Answer: b

#### 3. The neutral ligand is-

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

#### Answer: d

- 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

#### Answer: a

- 5. The complex compounds which result from the coordination of carbon monoxide are known as-
- a. Carbonates b. Carbon permono c. Electronic d. Carbonyls

#### Answer: d

#### 6. The oxidation number of cobalt in K[Co(CO)<sub>4</sub>] is-

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

#### Answer: d

- 7. The type of isomerism present in nitropentamine chromium (III) chloride is-
- a. Polymerisation b. Linkage c. Ionization d. Optical

#### Answer: b

#### 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]

## Answer: d

## 9. d2sp3 hybridisation leads to-

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

# Answer:d

# 10. What is the EAN of nickel in Ni(CO)<sub>4</sub>?

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

# Answer: b

11. In  $[NiCl_4]^{2-}$ , the number of unpaired electron is-

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

# Answer: a

# 12. The IUPAC name of [Ni (CO)<sub>4</sub>] is-

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

d. Tetra carbonyl nickel (0)

#### Answer: d

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.  $[Cr(NH_3)_6]^{3+}$  b.  $[Zn(NH_3)_6]^{2+}$  c.  $[Ni(NH_3)_6]^{2+}$  d.  $[Co(NH_3)_6]^{3+}$ 

# Answer: d

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

a.  $[Ag(NH_4)_2]OH$  b.  $[Ag(NH_3)_2]OH$  c.  $[Ag(NH_3)_2]CI$  d.  $[Ag(NH_4)_2]CI$ 

#### Answer: c

15. How many ions are produced in aqueous solution of  $[Co(H_2O)_6]Cl_2 -$ 

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

#### Answer: a

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