

Coordination Compounds

1. IUPAC name of $[\text{Pt}(\text{NH}_3)_3 \text{Br} (\text{NO}_2) \text{Cl}] \text{Cl}$ is

- (a) triamminechlorodibromidoplatinum (IV) chloride
- (b) triamminechloridobromidonitrochloride- platinum (IV) chloride
- (c) triamminebromidochloridonitroplatinum (IV) chloride
- (d) triamminenitrochlorobromoplatinum (IV) chloride

▼ **Answer**

Answer: c

2. Trunbull's blue is

- (a) Ferricyanide
- (b) Ferrous ferricyanide
- (c) Ferrous cyanide
- (d) $\text{Fe}_3[\text{Fe}(\text{CN})_6]_4$

▼ **Answer**

Answer: b

3. Primary and secondary valency of Pt in $[\text{Pt}(\text{en})_2\text{Cl}_2]$ are

- (a) 4, 4
- (b) 4, 6
- (c) 6, 4
- (d) 2, 6

▼ **Answer**

Answer: d

4. The complex ions $[\text{Co}(\text{NH}_3)_5(\text{NO}_2)]^{2+}$ and $[\text{Co}(\text{NH}_3)_5(\text{ONO})]^{2+}$ are called

- (a) Ionization isomers
- (b) Linkage isomers
- (c) Co-ordination isomers
- (d) Geometrical isomers

▼ **Answer**

Answer: b

5. Which of the following has square planar structure?

- (a) $[\text{NiCl}_4]^{2-}$
- (b) $[\text{Ni}(\text{CO})_4]$
- (c) $[\text{Ni}(\text{CN})_4]^{2-}$
- (d) None of these

▼ **Answer**

Answer: c

6. Which of the following has magnesium?

- (a) Chlorophyll
- (b) Haemocyanin
- (c) Carbonic anhydrate
- (d) Vitamin B₁₂

▼ **Answer**

Answer: a

7. Mohr's salt is

- (a) $\text{Fe}_2(\text{SO}_4)_3 \cdot (\text{NH}_4)_2\text{SO}_4 \cdot 6\text{H}_2\text{O}$
- (b) $\text{FeSO}_4 \cdot (\text{NH}_4)_2 \cdot \text{SO}_4 \cdot 6\text{H}_2\text{O}$
- (c) $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$
- (d) $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$

▼ **Answer**

Answer: b

8. Which of the following shall form an octahedral complex?

- (a) d^4 (low spin)
- (b) d^8 (high spin)
- (c) d^6 (low spin)
- (d) All of these

▼ **Answer**

Answer: b

9. EDTA is used for the estimation of

- (a) Na^+ and K^+ ions
- (b) Cl^- and Br^- ions
- (c) Cu^{2+} and Cs^+ ions
- (d) Ca^{2+} and Mg^{2+} ions

▼ **Answer**

Answer: d

10. The solution of the complex $[\text{Cu}(\text{NH}_3)_4] \text{SO}_4$ in water will

- (a) give the tests of Cu^{2+} ion
- (b) give the tests of NH_3
- (c) give the tests of SO_4^{2-} ions
- (d) not give the tests of any of the above

▼ **Answer**

Answer: c
