**Exercise 3:** Name the following.

1. K4[Ni(CN)4]
2. (NH4)3[Fe(SCN)6]
3. Na2[Ni(CN)4]
4. [Fe(ox)3]3-
5. [Co(NH3)5Cl]Br2
6. [Cr(OH2)4Cl2]Cl
7. [Pt(NH3)2]Cl2
8. Na2[MoOCl4]
9. [Cr(OH2)6](NO3)3
10. [Fe(NH3)6]SO4
11. (NH4)2[CoCl4]
12. Cr(NH3)4Cl2
13. [Co(P(CH3)3)4]2(SO4)3
14. [Ni(OH2)6]Cl2

**Exercise 4:** Write formulas for the following.

1. potassium hexacyanoferrate(III)
2. sodium hexafluoroaluminate
3. Pentaaquabromomanganese(III) sulfate
4. hexaamminechromium(III) nitrate
5. sodium tetrahydroxochromate(III)
6. hexaammineruthenium(III) tetrachloronickelate(II)
7. tetraamminecopper(II) pentacyanohydroxoferrate(III)
8. potassium diaquatetrabromovanadate(III)

**Answers –**

**Exercise 3:** Name the following.

1. K4[Ni(CN)4] **potassium tetracyanonickelate**
2. (NH4)3[Fe(SCN)6] **ammonium hexathiocyanatoferrate(III)**
3. Na2[Ni(CN)4] **sodium tetracyanonickelate(II)**
4. [Fe(ox)3]3-  **trioxalatoferrate(III) ion**
5. [Co(NH3)5Cl]Br2 **pentaamminechlorocobalt(III) bromide**
6. [Cr(OH2)4Cl2]Cl **tetraaquadichlorochromium(III) chloride**
7. [Pt(NH3)2]Cl2 **diammineplatinum(II) chloride**
8. Na2[MoOCl4] **sodium tetrachlorooxomolybdate(IV)**
9. [Cr(OH2)6](NO3)3 **hexaaquachromium(III) nitrate**
10. [Fe(NH3)6]SO4  **hexaammineiron(II) sulfate**
11. (NH4)2[CoCl4] **ammonium tetrachlorocobaltate(II)**
12. Cr(NH3)4Cl2 **tetraamminedichlorochromium(II)**
13. [Co(P(CH3)3)4]2(SO4)3 **tetrakis(trimethylphosphine)cobalt(III) sulfate**
14. [Ni(OH2)6]Cl2 **hexaaquanickel(II) chloride**

**Exercise 4:** Write formulas for the following.

1. potassium hexacyanoferrate(III) **K3[Fe(CN)6]**
2. sodium hexafluoroaluminate **Na3[AlF6]**
3. pentaaquabromomanganese(III) sulfate **[Mn(OH2)5Br]SO4**
4. hexaamminechromium(III) nitrate **[Cr(NH3)6](NO3)3**
5. sodium tetrahydroxochromate(III) **Na[Cr(OH)4]**
6. hexaammineruthenium(III) tetrachloronickelate(II) **[Ru(NH3)6]2[NiCl4]3**
7. tetraamminecopper(II) pentacyanohydroxoferrate(III) **[Cu(NH3)4]3[Fe(CN)5OH]2**
8. potassium diaquatetrabromovanadate(III) **K[V(OH2)2Br4]**