

Quadrant IV – Assessment (Module –wise)

Programme: Bachelor of Science (Second Year)

Subject: Chemistry

Course Code: CHC 104

Course Title: Physical Chemistry and Inorganic Chemistry (Section B)

Unit: 02

Module Name: IUPAC System of Nomenclature

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1. Choose the correct alternative

1. The oxidation state of Co in the complex $[\text{Co}(\text{SO}_4)(\text{NH}_3)_5]^+$ is -----

(a) 2+, (b) 3+, (c) 2-, (d) 0

2. $[\text{CoBr}(\text{NH}_3)_5]\text{SO}_4$ is

(a) Cationic Complex (b) Anionic Complex (c) Neutral complex (d) None of the above

2. Write the names of the following coordination compounds.

1. $\text{Na}_3[\text{FeCl}(\text{CN})_5]$

2. $\text{Ni}(\text{CO})_4$

3. $[\text{Co}(\text{H}_2\text{O})(\text{CN})(\text{en})_2]^{2+}$

3. Write the formula for the following coordination compounds

1. Pentaamminechloridocobalt(III) chloride

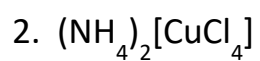
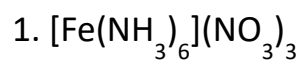
2. Amminebromidochloridonitrito-N-platinate(II)

3. Potassium hexafluorocobaltate(III)

4. Match the following coordination compounds in column A with their names as per IUPAC nomenclature in Column B

A

B



a) Hexaammineiron(III) nitrate

b) Hexaammineferrate(III) nitrate

c) Diammonium tetrachlorocuprate (I)

d) Ammonium tetrachlorocuprate(II)