

SHIVAJI COLLEGE, UNIVERSITY OF DELHI

DEPARTMENT OF CHEMISTRY

INTERNAL TEST (Academic Year 2023-24)

Name of the Course : Physical Science with chemistry Semester : V
Name of the Paper : Chemistry of d-block elements, Quantum Chemistry and Spectroscopy
Faculty Name : Dr. Priyanka Kumari
Duration : 1 Hr Maximum Marks: 10
Date of Test : 29.11.23

General Instructions:

1. Attempt all questions.
2. Write Course Name, Semester, Date of exam, Title of paper, Roll number and your Name on the top of answer sheet.

Questions:

1. Write the IUPAC Name 4 Marks
 - a. $[\text{CoCl}(\text{I})(\text{NCS})_2(\text{H}_2\text{O})_2]^-$
 - b. $[(\text{CO})_3\text{Fe}(\text{CO})_3(\text{CO})_3\text{Fe}]$
 - c. $[\text{Cr}(\text{CO})_3(\text{NH}_3)_5]\text{NO}_3$
 - d. $\text{K}_2[\text{OS}(\text{Cl})_5\text{N}]$
2. Which of the following ? 2 Marks
 - a. $[\text{Ru}(\text{bipy})_3]^{+2}$
 - b. $\text{Cis}[\text{RhCl}_2(\text{NH}_3)_4]^+$
3. Write the difference between double salt and co-ordination compounds. 2 Marks
4. Why tetrahedral complexes doesn't have geometrical isomers. 2 Marks

Faculty Signature:

Priyanka