

DEPARTMENT OF CHEMISTRY
II Semester M.Sc. (2023 – 24)
Course Evaluation Plan

Course: CY 751, Inorganic Chemistry II

The course will be evaluated in three components: Continuous evaluation, Mid-term test and End-term test.

1. The weightages for the three components are as follows:

Continuous evaluation	: 40 Marks
Mid term Test	: 20 Marks
End term Test	: 40 Marks

2. As a part of the continuous evaluation

- (i) Two quiz tests will be conducted, one in the first half and the other in the second half of the semester.
- (ii) A number of surprise tests will be conducted, throughout the semester.
- (iii) Assignments will be given.
- (iv) The quiz component will have 20 marks, surprise test component will have 15 marks and the assignment will have 5 marks.

3. The quiz tests will be scheduled as follows:

Quiz Test – 1	18.01.2024
Quiz Test - 2	14.03.2024

The Mid-term test and the end term test will be as per the schedule, given in the Academic calendar.

4. The End term test will be a comprehensive test including the entire syllabus of the course.
5. The question papers of the quiz tests, surprise tests, mid-term test and end term test will not have any choice.

COURSE PLAN AND THE EVALUATION PLAN

1. Course Code : CY 751
2. Course Title : Inorganic Chemistry III
3. L – T- P : 3-0-0
4. Credits : 03
5. Pre-requisite : Nil
6. Name of the Course Instructor : Dr. A. Nityananda Shetty
7. Teaching Department : Chemistry

8. Objective of the Course:
 - a) To understand some basic concepts of chemistry of d-block elements.
 - b) To know the theories of bonding in coordination complexes.
 - c) To get an insight into the optical and magnetic properties of compounds.
 - d) To understand the mechanism of reactions by complexes.

9. Skill development of the student expected from the course: 3 to 5 points.
 - a) Development of basic theoretical knowledge of chemistry of d-block elements.
 - b) Understanding the theories of bonding in coordination complexes.
 - c) Development of basic theoretical knowledge about optical, magnetic properties of complexes and understanding the reaction mechanism of their reactions.

10. Course Coverage (40 – Lecture Schedule):

Stage No.	Contents	No.of Lect.
1	d- and f- Block elements, general properties and their chemistry	8
2	Theories of bonding in complexes	12
3	Optical and magnetic properties	12
4	Reaction mechanism - reaction of complexes	10

11. Reference Books (If possible stage wise):

1. F.A. Cotton and G. Wilkinson, Advanced Inorganic Chemistry
2. H.T. Huheey, Inorganic Chemistry, Principles of Structure and Reactivity
3. Puri, Sharma and others, Principles of Inorganic Chemistry
4. S.F.A. Kettle, Coordination Chemistry
5. H.J. Emelees and A.G. Sharpe, Modern Aspects of Inorganic Chemistry