



बिरसा मुंडा ट्रायबल युनिवर्सिटी Birsā Munda Tribal University

राजपिपला, जि० नर्मदा Rajpipla, Dist. Narmda

Established by Tribal Development Department, Govt. of Gujarat

School of Science

B.Sc. (Chemistry) Programme

Subject Code & Name: - BS06MICHE1 & Applied Inorganic chemistry-IV

Teaching and Evaluation Scheme:

Teaching Scheme				Examination Scheme			
Credits				Component Weightage			
				CCE		SEE	
L	T	P	Total	TH	PWE	TH	PWE
2	-	2	4	25	25	25	25

Programme Name	B.Sc.
Semester	VI
Course Code	BS06MICHE1
Course Title	Applied Inorganic chemistry-IV
Course Content Type (Th./Pr.)	Theory & Practical
Course Credit	4
Sessions+ Lab. Per Week	4
Total Teaching/Lab. Hours	2 + 4
* 2 Laboratory = 1 Session	

Learning Objectives

1. The learning objectives for a Co-ordination chemistry course covering bonding theories, metallic bonding, and distortions center on understanding the electronic structure, stability, and magnetic properties of transition metal complexes.
2. Whereas the study of electronic spectra and term symbols focus on understanding how electrons are arranged in atoms and molecules, how these arrangements create specific energy states, and how transitions between these states produce spectra.
3. Students can learn Orgel Energy level diagram and R-S Coupling.
4. Students can calculate number of microstates for the different ground states

Prerequisites (if any)



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Web Resources	
1. Google books, INFLIBNET, Google Web	
Required Software(s) (if any)	
Practical(s) (if any)	
Practical based on Inorganic Chemistry Gravimetric Analysis: 1. Ba as BaSO_4 2. Mn as $\text{Mn}_2\text{P}_2\text{O}_7$ 3. Zn as $\text{Zn}_2\text{P}_2\text{O}_7$ Volumetric Analysis by self-preparation of EDTA 1. Estimation of Bi^{3+} by EDTA. 2. Estimation of Ni^{2+} by EDTA. 3. Estimation of Chloride by silver nitrate (Mohr's Method). 4. Estimation of Fe^{3+} by EDTA (Back Titration).	30

L:: Lecture, **T::** Tutorial, **P::** Practical

CCE:: Continuous and Comprehensive Evaluation

(CCE Theory includes Mid Semester Examination, Assignment, MCQ quizzes, Seminar, Reflective notes, class participation, case analysis and presentation, slip tests (announced/surprised), attendance etc. or any combination of these)

PWE:: Practical Work Examination

(PWE includes Laboratory practical work, project work, viva simulation exercise work etc.)

SEE:: Semester End Evaluation