

Semester	2
Paper Code	M1CH230211P
Paper Title	Introduction to Chemistry
No. of Credits	3
Theory/Composite	Practical
No. of periods assigned	3
Name of Faculty member(s)	Sanjib Ganguly Indranil Chakraborty Rahul Sharma Koushik Sarkar
Course description/objective	Theory: 1. Students would learn about various reaction and identification techniques applied in a chemistry laboratory
Syllabus	Annexure Multi-disciplinary Course
Text	
Reading/Reference Lists	1. Svehla, G., Vogel's Textbook of Macro and Semimicro Qualitative Inorganic Analysis, Longman 2. Nad, A. K., Mahapatro, B., Ghosal, A., An Advanced Course in Practical Chemistry, NCBA
Evaluation	Internal: 38; Attendance: 2

Introduction to Chemistry

1. Flame Test for Na^+ , K^+ , Ca^{2+} , Sr^{2+} , Ba^{2+} , Cu^{2+} .
2. Wet Test for acid radicals: Cl^- , SO_4^{2-} , PO_4^{3-} , SCN^- , $[Fe(CN)_6]^{4-}$, CrO_4^{2-} , S^{2-} , $S_2O_3^{2-}$.
3. Special test for Basic Radical: (a) $NaBiO_3$ test for Mn^{2+} . (b) DMG test for Ni^{2+} , (c) test for Fe^{3+} , (d) Test for Cu^{2+} , (e) Test for Co^{2+} .
4. Identification of organic functional groups (Dye test, Back-dye test, Mulliken Barker's test etc.)
5. Synthesis of "Oil of Wintergreen".
6. Synthesis of hydrazones having antimicrobial activity.