

# ACADEMIC PLANNER & UNITIZATION OF SYLLABUS

Department of Chemistry

Bankura Christian College

ACADEMIC YEAR: 2023-24 (Even Semester January, 2023 to June, 2023)

2<sup>nd</sup> Semester (Programme) Practical

## C1B- P2 – Inorganic Chemistry-II – Lab

Name of faculty member: Dr.SaugataSain

**Unit – 1:**Qualitative Semi -Micro analysis: Introduction to Semi-micro Qualitative Inorganic Analysis, Preliminary dry tests for common cation and anion radicals

**Unit – 2:** Wet tests and confirmatory tests for anion radicals

**Unit – 3:** Wet tests and confirmatory tests for cation radicals

MONTH	WEEK	TOPICS TO BE TAUGHT
March	3	Introduction to Semi-micro Qualitative Inorganic Analysis
March	4	Preliminary dry tests (ignition test including observation of sublimate if formed) for common cation like $Mn^{2+}$ , $Fe^{3+}$ , $Ni^{2+}$ , $Cu^{2+}$ , $NH_4^+$ .
April	1	Preliminary dry tests (Flame test, Borax bead test, Fusion test) for common cation like $Na^+$ , $K^+$ , $Ca^{2+}$ , $Sr^{2+}$ , $Ba^{2+}$ , $Cr^{3+}$ , $Mn^{2+}$
April	2	Do
April	3	Preliminary dry tests for common anion radicals (heating with dilute $H_2SO_4$ , concentrated $H_2SO_4$ and $MnO_2$ with concentrated $H_2SO_4$ like anions $Cl^-$ , $Br^-$ , $I^-$ , $NO_2^-$ , $NO_3^-$ , $S^{2-}$ , $BO_3^{3-}$ ,
April	4	Wet tests and confirmatory tests for anion radicals like $Cl^-$ , $Br^-$ , $I^-$ , $NO_2^-$ , $NO_3^-$ , $S^{2-}$ , $SO_4^{2-}$ using aqueous as well as $Na_2CO_3$ extracts
May	1	Do
May	2	Wet tests and confirmatory tests for cation radicals (Analytical group analysis): $Na^+$ , $K^+$ , $Ca^{2+}$ , $Sr^{2+}$ , $Ba^{2+}$ , $Cr^{3+}$ , $Mn^{2+}$ , $Fe^{3+}$ , $Ni^{2+}$ , $Cu^{2+}$
May	3	Do
May	4	Do
June	1	Unknown sample analysis
June	2	Unknown sample analysis