

Roll No.



**PRESIDENCY
UNIVERSITY**
BENGALURU

Department of Research & Development
Mid - Term Examinations - SEPTEMBER 2024

Odd Semester: Ph.D. Course Work	Date: 27 /09/2024
Course Code: CHE 806	Time: 2:00pm – 3:30pm
Course Name: Instrumental Methods of Analysis	Max Marks: 50
Department: Chemistry	Weightage: 25%

Instructions:

- (i) Read all questions carefully and answer accordingly.
(ii) Do not write anything on the question paper other than roll number.

Part A

Answer ALL the Questions. Each question carries 5 marks.		4Qx5M=20M
1	Interpret the ¹ H NMR spectrum for 1-Propanol molecule with δ -value and splitting pattern.	5 Marks
2	Define the following terms. R _f value and b) Mobile phase	5 Marks
3	Write any four importance of analytical chemistry.	5 Marks
4	Explain the following analysis with examples. a) Qualitative analysis and b) Quantitative analysis	5 Marks

Part B

Answer ALL Questions. Each question carries 15 marks.		2Qx15M=30M
5	Explain the UV absorption of carbonyl compounds: α,β -unsaturated carbonyl systems.	15 Marks
6	With necessary examples, explain the Fingerprint region in FT-IR and its importance	15 Marks