

Third Semester Internal Examination, September 2024
Minor Course in Chemistry
Bio-organic Chemistry
CHE3MN202

Time: 1 Hr

Max Marks: 35

Name:	Marks Scored	Section A		Total Marks
Class:		Section B		
		Section C		

Section A

(Each question carries 3 marks, Max marks for section – 7)

1. Illustrate Kolbe's electrolytic method.
2. What is a coupling reaction? Give an example.
3. Define hyperconjugation.

Section B

(Each question carries 6 marks, Max marks for section – 18)

4. Explain the basicity of amines by comparing the basic strengths of ammonia, methylamine, and aniline.
5. Compare the reactivity of nucleophilic addition reactions of aldehydes and ketones.
6. How is methyl orange prepared? what are its uses?
7. How will you convert (a) ethyl magnesium halide and (b) propanoic acid into ethane?

Section C

(Answer any one question, Each question carries 10 marks)

8. Explain the following reactions: (a). Hofmann's carbylamine reaction. (b). Clemmensen reduction. (c). Hoffmann's bromamide reaction. (d). Sandmeyer reaction and (e). Gattermann reaction.
9. Explain Inductive effect with suitable examples.