



# ADITYA DEGREE & PG COLLEGE ANDHRA PRADESH

MID-I EXAMINATIONS – FEB 2025

DATE 07-02-2025

B.Sc - IV SEMESTER

TIME: 3 Hrs

(CHEMISTRY MAJOR)

MAX MKS: 60M

NITROGEN CONTAINING ORGANIC COMPOUNDS

## SECTION-A

I. Answer any FIVE of the following questions:

5 X 4 = 20 M

1. Coupling reaction.
2. Hinesburg Reagent Method
3. What are Amino acids? Write Acidic, Basic Neutral Amino acids.
4. Explain zwitter ION.
5. Definition of Isoelectric point.
6. Classification of  $\alpha, \beta, \delta$  Amino acids.
7. What is peptide? Write their Nomenclature.
8. Classification of Amines.

## SECTION-B

II. Answer all the following questions:

4 X 10 = 40 M

9. a) Explain preparation of Amines.

(OR)

b) Explain preparation of Amino acids.

10. a) How to prepare diazonium salts? Write any three properties.

(OR)

b). Explain properties of Amino acids-reaction involved –  $\text{COOH}$  group and –  $\text{NH}_2$  group.

11. a) Explain with Mechanism carbylamines, Hoffmann Exhaustive methylation, Cope elimination.

(OR)

b) Explain about proteins.

12. a) How to distinguish  $1^\circ, 2^\circ, 3^\circ$  Amines write their reactions.

(OR)

b). Classification of Amino acids.