

ASSIGNMENT

Topic: Chemical Degradation Pathways in Drug Substances

Course: B.Pharm / M.Pharm (Pharmaceutics)

Subject: Drug Stability

Institute: Krishna Institute of Pharmacy

Prepared by: Mr. Raghwendra R. Waghmode

Instructions to Students

1. Answer all questions.
2. Write neatly and clearly.
3. Include diagrams wherever necessary.
4. Submission should be in handwritten or printed format.
5. Mention references wherever applicable.

Assignment Questions

Section A (Long Answer - 10 Marks each)

1. Explain in detail the various chemical degradation pathways in drug substances with suitable examples.
2. Discuss oxidation and hydrolysis reactions along with factors affecting them and their prevention methods.

Section B (Short Answer - 5 Marks each)

1. Define racemization and explain its pharmaceutical significance.
2. Write the factors affecting drug degradation.
3. Explain polymerization with examples.

Section C (Very Short Answer - 2 Marks each)

1. Define oxidation.
2. What is hydrolysis?
3. Give one example of polymerization.

Additional Task

Prepare a flowchart summarizing all chemical degradation pathways and their prevention strategies.

Student Details

Name: _____

Class: _____

Roll No: _____

Date of Submission: _____