

2012 Scheme

QP CODE: 112006

Reg. No:

First Year B. Pharm Degree Supplementary Examinations June 2025 Pharmaceutical Chemistry - II

(Organic Chemistry)

Time: 3 Hours

Total Marks: 100

- Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together • Leave sufficient space between answers
- Write equations wherever necessary.

Essay

(3x10=30)

1. Write the mechanism involved in the addition of hydrogen halides and addition of water to alkynes. Write a note on stereospecific reduction of alkynes.
2. Explain the kinetics, mechanism, reactivity, orientation and stereochemistry involved in SN_1 reaction with suitable example.
3. Explain the mechanism and applications of Benzoin condensation and Perkin condensation with suitable examples.

Short notes

(14x5=70)

4. Give a note on Fries rearrangement.
5. Explain in detail about molecular orbital concept of cycloalkanes.
6. Explain why conjugated dienes are more stable than non-conjugated dienes.
7. Outline the Hoffmann's degradation of amides.
8. Explain in detail about free radical substitution reactions of alkanes with suitable example.
9. Describe the mechanism of action of aldol condensation with example.
10. Write a note on basicity of amines.
11. Explain the mechanism involved in diazotization and give the significance of diazonium salts with examples.
12. Classify alcohols with suitable examples. Write briefly the effect of hydrogen bonding in alcohols.
13. Explain in detail about Baeyer's Strain theory.
14. What is Huckel's Rule. Explain the concept of aromaticity and resonance in benzene.
15. Outline the stereochemistry of $E2$ and $E1$ reactions.
16. Explain peroxide effect of electrophilic addition with a suitable example.
17. Write a note on dicarboxylic acids.
