

# 2010 Scheme

QP CODE: 102006

Reg. No: .....

## First Year B. Pharm Degree Supplementary Examinations January 2023

### 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. • Explain about inductive and electrometric effects
  - State and explain Bayers Strain theory
2. Describe the electrophilic substitution orientation of monosubstituted benzene with examples
3. Explain the following with reaction mechanism
  - Walden inversion
  - Aldol condensation

#### Short notes

(14x5=70)

4. Describe Williamson's ether synthesis
5. What is Riemer-Tiemann reaction. Outline the reaction mechanism
6. Explain the terms of heat of combustion and hydrogenation
7. Give a note on 1,4-addition reactions of conjugated alkadienes
8. What is Fries rearrangement reaction. Outline the reaction mechanism.
9. Explain the concept of isomerism with examples
10. Give two methods of preparation for carbonyl compounds
11. Explain free radical substitution mechanism
12. State and explain anti-markownikov's addition
13. Hofmanns degradation of amides
14. Acidity of nitro compounds
15. Outline the reactions of Reformatsky reaction and Oppenauer oxidatioin
16. How do you distinguish different class of amines using Hinsberg method
17. Describe the synthesis of malonic esters

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