

[SB 578]

**Second B. Pharm. Degree Examination**

(New Regulations)

**Paper II—ADVANCED PHARMACEUTICAL  
ORGANIC CHEMISTRY**

Time : Three hours                      Maximum : 90 marks  
Two and a half hours                  Sec. A and B : 60 marks  
for Sections A and B

Answer Sections A and B in separate answer books  
Answer section C in the answer sheet provided

**SECTION -A                      (2X15 = 30)**

Answer any TWO questions

- Write notes on the synthetic method, structure, aromaticity and reactions of
  - Pyrrole
  - Furan

(7½ + 7½ = 15)
- Explain the source, evidence for the structure, synthetic methods, reactions including orientation and important derivatives of Naphthalene. (15)
- What are the methods available for the resolution of racemic modification? Explain them with example.
  - Write notes on the isomerism exhibited by oximes and amines. Mention their nomenclature (8+7)

- Explain sequence rule and their use in naming Geometrical isomerism.
  - Write the structure and number the carbons of acridine, phenothiazine, quinoline and isoquinoline. Name a drug having each of the above nucleus and mention the use. (9+6)

**SECTION—B                      (6 X 5 = 30)**

Answer any SIX questions

- Write the synthetic methods for imidazole
- Write notes on the synthesis of Triphenyl methane and its properties.
- Define confirmation. Show the types of confirmation in cyclohexane and their relative stability.
- Explain the mechanism of walden inversion.
- Explain the absolute asymmetric synthesis. How does it differ from partial asymmetric synthesis.
- Write the structure of all possible isomers in the following compounds.
  - 2 Butene dioic acid
  - 2,5—dimethyl cyclohexane
  - 2 Methyl-3 penten - 2 - ol
  - 2-2' dinitro 6,6' diphenic acid
- Write the synthetic methods Quinoline
- Write notes on Atropisomerism
- Name the element of symmetry. Explain any one of them with suitable examples.