

APRIL - 2000

[KB 707]

Sub. Code : 4182

SECOND B.Pharm. DEGREE EXAMINATION.

(Revised Regulations)

Paper II — ADVANCED PHARMACEUTICAL  
ORGANIC CHEMISTRY

Time : Three hours                      Maximum : 90 marks

Two and a half hours                  Sec. A & Sec. B : 60 marks  
for Sec. A and Sec. B                  Section C : 30 marks

Answer Sections A and B in separate answer books.

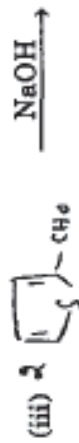
Answer Section C in the answer sheet provided.

SECTION A — (2 × 15 = 30 marks)

Answer any TWO questions.

1. (a) Give one method of synthesising Naphthalene. (5)
- (b) How many resonating structures are there for Naphthalene? What is Fries Rule? (2 + 3)
- (c) What products are obtained when Naphthalene is (2½ + 2½)
  - (i) oxidised and
  - (ii) reduced?

2. (a) What rules are followed in the nomenclature of Heterocyclic compound? (6)  
 (b) Give the synthesis and reactions of Pyrrole. (6)  
 (c) Name the reaction and the product that will be formed in the following reactions : (3)



3. Discuss in detail the stereochemistry of cyclohexane and Biphenyls. (7½ + 7½)  
 4. (a) How can one decide whether a particular structure is capable of existing in optically active forms? (8)  
 (b) How can one determine the configuration of geometrical isomers? (7)

SECTION B — (6 × 5 = 30 marks)

Answer any SIX.

5. Write briefly on Triphenyl methane dyes.  
 6. There is no free rotation about a single bond — Explain.  
 7. What conventions are followed in nomenclature in Stereochemistry? (both optical and geometrical isomers)  
 8. Write briefly on 2 Rearrangement reactions.  
 9. Compare the basicity of Pyrrole, Pyridine and Alkylamines.  
 10. Discuss the isomerism of Ketoximes.  
 11. Give the structures and medicinal uses of 2 compounds having a Pyridine ring.  
 12. What methods may be followed for conversion of alkene to alkane?  
 13. Give the structures and medicinal uses of :

- (a) Primaquine  
 (b) Naphazoline  
 (c) Phennytoin  
 (d) Piperazine  
 (e) Sulphathiazole.