[KU 707] Sub. Code: 4182

SECOND B.PHARM. DEGREE EXAMINATION

(ReRevised Regulations)

Candidates Admitted upto 2003-04

Paper II – ADVANCED PHARMACEUTICAL ORGANIC CHEMISTRY

O.P. Code: 564182

Time: Three hours

I. Essay Questions:

Answer any TWO questions

(2 x 20 = 40)

- 1. a) Briefly explain the systematic method of nomenclature of Heterocyclic compounds, with suitable examples. (6)
 - b) Explain the synthesis of quinoline and main reaction. (6)
 - c) Give the preparation and reactions of triphenyl methane. (8)
- 2. Explain the following reactions:
 - a) Beckmann rearrangement. (5)
 - **b)** Birch reduction. **(5)**
 - c) Meerwin-pondroff reduction. (5)
 - d) Asymmetric synthesis. (5)
- 3. a) Define Walden inversion. Explain the factor which affect its mechanism. (10)
 - b) What is racemic modification? Explain the different methods that are utilized for resolution of racemic modification. (10)

II. Write Short Notes: Answer any EIGHT questions $(8 \times 5 = 40)$

- 1. Conventions used in stereochemistry.
- 2. Write the important properties of thiophen.
- 3. Explain the stability of cis-trans isomerism.
- 4. Write note on
 - a) Metalhydride reduction b) oxidation with selenium oxide
- 5. Write the structure and uses of following: a) Phenytoin b) Mepacrine
- 6. Give three reactions of phenothiazine.
- 7. Write a note on stereo chemistry of Biphenyls.
- 8. Medicinally important compounds of phenanthrene.
- 9. Give methods of preparation of anthracene.
- 10. Modern concept of double bond.

III. Short Answers: Answer any FIVE questions $(5 \times 2 = 10)$

- 1. Define optical isomerism.
- 2. Chirality.
- 3. Dehydrogenation.
- 4. Give the structure and uses of primidone.
- 5. Atropisomerism.
- 6. Write the structure of Indole and pyrimidine.
- 7. What are triphenyl methane dyes?