

August 2009

[KV 707]

Sub. Code: 4182

**SECOND B.PHARM. DEGREE EXAMINATION**  
**(ReRevised Regulations)**  
**Candidates Admitted upto 2003-04**  
**Paper II – ADVANCED PHARMACEUTICAL ORGANIC**  
**CHEMISTRY**  
**Q.P. Code : 564182**

**Time : Three hours**

**Maximum : 90 marks**

**I. Essay Questions : Answer any TWO questions (2 x 20 = 40)**

1. Out line the general methods of synthesis and reactions of the following:  
a) Nephthalene. b) Triphenyl methane. c) Phenanthrene.
2. a) Classify Heterocyclic compounds with examples.  
b) Give the synthesis and important reactions of the following  
i) Furan ii) Acridine iii) Pyridine iv) Indole.
3. a) What are racemic modifications. Explain the various techniques used for the resolution and racemic modifications.  
b) Give a brief account of optical isomerism of tartaric acid.

**II. Write Short Notes : Answer any EIGHT questions (8 x 5 = 40)**

1. Write a note on stereochemistry of biphenyls.
2. Enumerate the methods available for resolving a racemic mixture and describe any one of them.
3. Give one method of synthesis and any two reactions of Quinoline.
4. Give the structure and use of the following.  
a) Phenergan b) Mepacrine c) Phenytoin d) Isoniazide e) Chlorquine
5. Explain the phenomenon of Walden inversion with examples.
6. Explain the conformation of cyclohexane,
7. Write note on: a) Schmidt rearrangement b) Metal hydride reduction
8. Explain the sequence rules relating the R and S configuration.
9. Describe the preparation and reactions of Anthracene.
10. Write notes on : “Oxidation with Perchloric and lead tetra acetate”.

**III. Short Answers: Answer any FIVE questions (5 x 2 = 10)**

1. Define: a) Catalytic dehydrogenation. b) Darzein reaction.
2. Write two synthesis of diphenyl methane.
3. Write the structure and uses of : a) Nephazoline b) Primidone.
4. Define the following: a) Chirality b) Allenes and spirans.
5. Define: a) Meso compounds b) Asymmetric synthesis.
6. Describe the any two reactions of phenothiazine.
7. How will you synthesize the pyrrole?

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