

APRIL - 1990

014

SECOND B.Pharm. EXAMINATION, APRIL 1990  
ADVANCED PHARMACEUTICAL ORGANIC CHEMISTRY

Time : Three hours      Maximum : 100 marks

(i) Answer any SIX questions of which Questions  
4 and 8 compulsory.

(ii) Write the structural formulae wherever necessary.

SECTION I

1. Mention different methods of preparation and important reactions of pyridine or pyrrole. (15)
2. Discuss different methods of synthesis and the chemical reactions of diphenyl methane and thiophen. (15)
3. Discuss the isomerism of the tartaric acids. (15)
4. Write explanatory notes on the following and mention their uses :
  - (a) Hantzsch synthesis.
  - (b) Fischer's synthesis.
  - (c) Friedlander synthesis.
  - (d) Elb's reaction. (20)

5. Give an important synthetic method for preparing pyrimidine. Explain the structures of its three isomers. Mention the physiological importance of the derivatives of pyrimidines. (15)

6. Discuss three different methods of synthesis of anthracene. Mention some of its important properties. How can anthracene be converted to anthraquinone and dithranol ? (15)

7. Discuss geometrical isomerism with examples. What are the specific properties, which are essential in the molecules of compounds, to exhibit geometrical isomerism ?

8. Write notes on the following :

- (a) Optical activity.
- (b) Configurational formula.
- (c) Resolution of racemic modifications.
- (d) Walden inversion. (20)