APRIL - 1991

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SECOND B.PHARM. DEGREE EXAMINATION, APRIL 1991

Paper II — ADVANCED PHARMACEUTICAL ORGANIC CHEMISTRY

Time : Three hours. Maximum : 100 marks.

Answer SIX questions.

Questions No. 1 and 5 are compulsory.

Write chemical equations and structural formulae wherever necessary.

1. (a) Briefly explain the systematic method of Nomenclature of Heterocyclic compounds, with suitable examples. (6 marks)

(b) Write name and structure of any three heterocyclic rings having "oxygen" as hetero atom. (3 marks)

(c) Give an account of the synthesis and reactions of pyrrole. (9 marks)

2. Write notes on the followings :

(a) Friedal Crafts reaction and its use in the synthesis of polynuclear hydrocarbons. (5 marks)

(b) Fisher's Indole synthesis. (5 marks)

(c) Elements of symmetry. (6 marks)

3. Explain the preparation and chemical reactions of Naphthalene. (16 marks)

4. (a) Explain the chemistry of Diphenyl Methane. (10 marks)

(b) Name the pharmaceutically important compounds of Triphenyl methane derivatives. Write their skeleton structure and use. (6 marks)

5. (a) Define stereo isomerism. Name the types of stereo isomerisms you have studied. (4 marks)

(b) What are enantiomers ? Give two examples. Compare the physical, chemical and Biological properties of enantiomers. (7 marks)

(c) What are diastereomers ? Give two examples. Compare the physical, chemical and biological properties of diastereomers. (7 marks)

6. Write notes on the followings :

(a) Meso compounds. (5 marks)

(b) Partial Asymmetric synthesis. (5 marks)

(c) Atropi isomerism. (6 marks)

7. Write an essay on the chemistry of Quinoline and Isoquinoline. (16 marks)

8. Write note on the followings :

(a) Phenothiazine. (6 marks)

(b) Conformation. (5 marks)

(c) 'Z' and 'E' configuration. (5 marks)

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